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A magazine that began in an era dominated by electronic messages now clearly is both an act of intellectual courage and fervent hope for the future. Especially in countries that are developing into modern industrial sense, such as Albania, a magazine like this could mark a turning point than the political theories still purely intuitive or dogmatically metaphors of the past. Even the Albanian society, exactly like the rest, in this respect, the other technically advanced society, needs the sociological and political field. In other words, the social and political relations can not be experienced in traditional magic, or just under the authority of the 'eternal yesterday'. It is time to execute a concept and practice of social development that are based on systematically responsible participation of all citizens.

Franco Ferrarotti
Prof. Emeritus of La Sapienza University, Italy
Founder of La Critica Sociologica

Franco Ferrarotti, the best known Italian sociologist, is one of the world's most famous sociologists. His numerous books have been translated into French, English, Spanish, Russian and Japanese. He has collaborated with leading scientific US journals, as well as Europe. He is the author of several books evaluated by popular writers, artists and social scientists.

Summary

1. Deconstructing the Struggle Against Nuclearism

Prof. Richard A. Falk
Princeton University, USA

In such a complex and uncertain world, it may help to think like a Hindu, and accept contradiction as more in keeping with social and political reality than is finding a right answer to complex policy puzzles. What is almost impossible for those trained within Western frames of reference is to grasp that there are diverse perspectives of understanding that may result in seemingly contradictory recommendations despite shared values and goals. Civilizational perspectives and personal experience inevitably color what we feel, think, and do, and so being likeminded when it comes abolishing nuclear weapons is often coupled with somewhat divergent views on what to advocate when it comes to tactics and priorities.

In this spirit, this paper tries to depict a set of reasons why the goal of nuclear disarmament will never be reached so long as arms control and nonproliferation of nuclear weaponry are seen as the pillars of global stability in the nuclear age.

2. China's innovation-based approach in the fight of Covid-19.

An estimation of China's impact for global health to come

Dr. Josie-Marie Perkuhn
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FB- II Sinologie, Trier University, Rhineland-Palatinate, Germany

When the infectious coronavirus SARS-CoV-2 broke out it resulted in a global crisis. In the fight of Covid-19, China's government relied on its strength to apply new technologies, i.e. for controlling and containment of the virus by tracing and tracking Chinese citizens. Relying on the trajectory of industrialisation, China has pursued a path of innovation. While it is reasoned that China's advantage might have origin in the experience of the SARS outbreak almost two decades ago, this article argues that mainly China's innovation-driven climate has favoured the application of new technologies in combatting the current crisis. Based on the innovation-driven trajectory this article explores China's pathway out the corona crisis and how this might strengthen China's role in global health governance. In order to pursue this aim, this article explores several areas, in which the next generation of technologies, such as AI-based diagnostic or intelligent robots were applied and concludes with an outlook based on the formulated political agenda, strategic considerations and initial international cooperation regarding China's impact for global health.

3. Edward Wilmot Blyden.

The African Personality and Early Intellectual Work in the Gold Coast (Ghana)

Ahmed Bouchemal, PhD Candidate

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There is a commonly held view that African nationalism took shape out of contacts of African intellectuals with twentieth century Pan-African leaders. Yet, this interpretation lacked concrete evidence, as many of these intellectuals owed their ideological formulation to Nineteenth century teachings of Edward Wilmot Blyden. In his writings, Blyden articulated a thorough understanding of African's strengths and weaknesses. For Blyden, Western civilization intended to make the African a caricature of European society. As a result, the situation of the African became one of chaos as he lived in strict psychological conflicts. A revival of the African personality rested as a solution to the distorted manhood of the African and a path to his future progress. This article examines Blyden's theory of the African personality as revealed in early intellectual work in the Gold Coast (Ghana). Drawing on Blyden's African personality theory, the article revealed that these intellectuals begun a vigorous campaign to oppose Europeanization of the African system of life and took an uncompromising stand against ideas of black "inferiority" and "backwardness".

4. Burning up and burning out.

Human Sustainability in a Time of Emotional Climate Change

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MBA at Harvard Business School (Honors)

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The world is focused on countering climate change to guarantee our survival. But as our planet burns up, we are burning out. The costs of mental health disorders dwarf those of climate change and yet do not get commensurate attention from global leaders. Health care providers and organizations have acted first but need support of the financial markets and public decision-makers. In this paper, we argue that the economic and social toll of mental health and wellbeing issues deserve equal attention from business and public leaders because Human Sustainability is as important as Environmental Sustainability for our ability to endure and thrive as a species in harmony with others.

5. New technologies` impact on workforce and labor law

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If we look back, evaluating the last two centuries, the productive environments of our societies have experienced several industrial revolutions that caused great changes in production and that, in turn, generated important changes in societies at all times.

Likewise, the digital transformation that has been incorporated into the bases of companies, each one in its measure, has not yet reached its maximum potential, but it has changed the way we live and, therefore, the way we work.

Historically, automation has come from the hand of specialization, not because of the manufacture of tractors the land has been stopped, but more has been produced and that production has been managed in favor of employment and economic health. Technological transformations hand in hand with digitalization and artificial intelligence generate opportunities, but they also represent a threat to a good part of traditional jobs and professions, since changes are rapid and the impact of new technologies is much greater; thus, the change in the training and qualification of workers is necessary.

Like the looms in the 18th century and the production models at the beginning of the 20th, digital transformation is our present, but it will be much more powerful in the future, as it entails and will entail a redefinition of the labor market and the law that governs it. regulates. Globalization and technological changes have generated a need to address labor law from a global perspective; Furthermore, this right must not only be active, but also effective, solid, in accordance with international decent work standards.

6. Global Inclusion, Diversity, Belonging, Equity, and Access - GIDBEA. The Architecture of A New Different

Lisa Coleman, PhD
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The article asserts the need for organizations to adopt intentional and transformative Global Inclusion, Diversity, Belonging, Equity, and Access (GIDBEA) practices, to ensure their future readiness. The research developed reaffirms the benefits of GIDBEA

strategies in identifying gap areas and navigating crises, by providing insights on how to successfully embed a ‘*new different*’ GIDBEA strategy into organizational frameworks. By drawing trends across the 2020-2021 COVID-19 pandemic and other previous health and economic crises, it is indicated what is described as the “normality of disruption” and the need to move away from the idea of a ‘new normal’ to a *new different*. The *new different* acknowledges that the ‘normal’ or the status quo was often challenging for many. The impact and importance of the disruptions that individuals, communities, nations, etc., all have and will face together, is also recognized. The *new different* emphasizes organizational transformation through co-creation, sustainability, adaptivity, resilience, and design thinking. By implementing a design thinking model, GIDBEA proactively engages mistakes while promoting innovation through dissent and disruption. As a result, disruptions are not considered episodic crises but as recurring, expected, and presenting opportunities. Furthermore, it is argued that GIDBEA expertise is essential for remaining agile, innovative, and providing strategic organizational architecture to prepare and innovate for these disruptions. However, it is necessary to consider that GIDBEA practice can be limited due to the failure of organizations and leaders to frame it as an asset and develop strategic plans to leverage it in the same way they do other critical functional business units. Therefore, unless prioritized and conducted intentionally, GIDBEA work will not achieve its promised bonuses and transformative potential.

The article offers readers insights and tools to assess existing GIDBEA within their organization. Using metaphors of “construction” and “architecture,” it illustrates how reimaging organizational architectures and constructing initiatives focused on GIDBEA are fundamental to resiliency, organizational sustainability, and the ability to thrive through shifting landscapes.

7. Regional management of the Bay of Bengal water area.

The challenges of maritime security

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The Bay of Bengal is the largest bay in the world that forms the northeastern part of the Indian Ocean, bordered mostly by the Eastern Coast of India, southern coast of Bangladesh and Sri Lanka to the west and Myanmar and the Andaman and Nicobar Islands (part of India) to the east. The regional management of the Bay of Bengal water area is performed by regional organisations such as ASEAN, SAARC, BIMSTEC and IORA unifying Bay’s coastal states. Nevertheless, differences in political and economic interests of the states, separate conflicts between states and consequences of the

pandemic not only challenged the integrity of the regional management but also led to rising insecurity of the Bay of Bengal and fears to navigate in that area. In this article, the authors, in a more detailed way, will disclose existing regional management systems, concerns related to maritime security and give recommendations on how to increase efficiency in collective management of maritime security issues and how the concept of due diligence may play the vital role in the regulation of not only maritime security aspects but also aspects of environmental protection and potential transition to the blue economy.

8. Factors Affecting Profitability of Insurance Companies.

Evidence from Kosovo

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Profitability expresses the ability to make a profit from all the business activities of the company. It shows how efficiently management generates profit by utilizing all available resources. This paper examined the effects of specific company factors, namely independent variables such as: liquidity, company size, company age, tangible asset, leverage, company capital and growth of company, on profitability represented by return on assets (ROA) and net profit margin (NPM) as a dependent variable. The sample in this study includes eleven insurance companies for the period 2015 - 2020. The regression results indicate that size, leverage and age of company, have significant effects on the ROA. Meanwhile in NPM of insurance companies in Kosovo size of company and firm growth have significant effects.

9. Community of Practice as a teaching approach in a postgraduate environment.

An insider ethnography of a higher education institution in South Africa

Prof. As. Roman Tandlich, PhD
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Technical University of Liberec, Czech Republic

This auto-ethnographic description of the experiences in the development of the teaching and learning approach, at the postgraduate level, introduces the impact of the community of practice in the development of the learning processes in South Africa, with an international view. The principles of community of practice are outlined and the theoretical grounding is provided in terms of the notion of assemblage theory, the definitions of fundamental and derivative epistemic authority, as well as the assemblage boundary and the personal intents of the community of practice members. The theoretical grounding is then applied through several iterations of the community

of practice between 2006 and present. The adaptive nature of the community of practice as an assemblage and the function as a sociology-of-knowledge system are outlined.

10. Family Violence Resolution Strategies.

Legal Prevention and Education Against Ignorance

Prof. Firuza Mukhitdinova, PhD

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The article analyses the strategies for reducing the phenomena of domestic violence, focusing on the legal preventive measures. It highlights the historical aspects of the problem, by referring to the legal framework, in trying to overcome it. By introducing the causes and the nature of the domestic violence in Uzbekistan, leveraging into a theoretical, historical and legal analysis, social measures are weighted in relation to the domestic violence. The methodological approaches in the study of social processes of domestic violence are used meanwhile evaluating the social consequences of domestic violence, considering the correlation between the increased instability in the society and the level of social dissatisfaction of the population. The paper, by referring to the Laws of the Republic of Uzbekistan “On the Protection of Women from Oppression and Violence”, as well as to several other laws and regulations on regard, makes a review to the reforms and notebooks such as “iron notebook”, “youth” and “women”, where special attention is paid to the correlations between unemployment of youth and women and the phenomena of domestic violence.

11. Students satisfaction with the online teaching process

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Assoc. Prof. Laurențiu Gabriel Țîru, PhD

West University of Timisoara, Romania

This study is about student satisfaction in the online teaching process. The pandemic situation forced us to move the educational activities in the online environment for the safety of all its participants.

The methodological design is the quantitative one, the research method used is the sociological survey. This study tried to identify students’ perception, effectiveness, satisfaction, and self-perceived efficiency regarding the teaching process in the online environment.

The questionnaire was translated and adapted into Romanian. It consists of 26 questions, divided into five dimensions. The sampling method was the non-probabilistic convenience one, with voluntary participation.

The results provided tell us those female respondents were more open to online methods, resulting in higher satisfaction despite common knowledge. However, the results should be viewed with reservations, as the data collected are not homogeneous, and the respondents were chosen by the voluntary participation method. This approach can be seen as a starting point for future research related to the satisfaction of the teaching process through e-learning.

12. Economic Strain and Adolescent Violence.

Are extracurricular activities a conditioning effect?

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Brittani Walker, M.S.

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This article examines the extent to which participation in sports acts as a conditioning effect to the relationship between economic disadvantage and adolescent violent delinquency. Deriving hypotheses from general strain and social control theories, we use data from the National Longitudinal Study of Adolescent Health to test if type of extracurricular activity participation diminishes the risk of economic disadvantage on violent delinquency. In support of social control theory, the direct effect of academic clubs and performing arts is negatively associated with adolescent violence. Additionally, analyses indicate that participation in contact sports decreases the relationship economic disadvantage and violent delinquency when other strain controls are added including race/ethnicity, family structure, lack of parental supervision, etc. Overall findings are expected of the social control conditioning effect of general strain theory.

13. The criminal liability of the medical team considering the recent orientation of the Italian Court of Cassation

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This article aims to analyze the thematic of medical team liability considering the recent Italian Supreme Court case-law, highlighting the various problems linked to the identification of the responsibility of each member of the team. The participation of several subjects in the execution of medical treatment makes the question of criminal liability very complex, especially when it comes to inauspicious events, such

as injuries or death, occurring during medical treatment. The question concerns the exact identification of the duty of care and vigilance of the medical team and whether this duty is in line with the principle of individual criminal responsibility guaranteed by Article 27 of the Italian Constitution.

In this regard, the case-law has elaborated the so-called “principle of reasonable confidence”, according to which the division of labour that belongs to each member should involve a delimitation of his responsibility, limited only to what is within his competence, except in case of the person who organizes, directs, and controls the team. Precisely, based on this principle, the Italian Supreme Court in 2018 reasserted that in the medical team is necessary to identify the role played by each member, thus avoiding resorting to objective responsibility.

14. Locus of control and culture of poverty.

An appraisal of Lawrence M. Mead’s ideas in ‘Culture and Poverty’

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Lawrence M. Mead presented an interesting argument as to why poverty exists in the United States. He problematizes the culture of the poor of which ethnic minorities over-represent. By referring to the geographic regions from which these ethnic minorities came from, he globalised the question of poverty in the US. This invites a global policy debate rather than a US-centric policy debate. Indeed, Mead so freely made references to Africa and the African culture severally throughout his commentary. It is against this backdrop that I show that Mead was right to a large extent on the question of inner-driven individualised orientation. However, he overestimates its influence and misreads what culture is. He presented the culture of poverty as the antecedent of poverty. It was concluded that manipulating both internal drive (internal locus of control) and the structure of society is a more effective way to tackle poverty.

15. Intuitive Learning in Moral Awareness.

Cognitive-Affective Processes in Mencius’ Innatist Theory

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Mencius, referred to as second sage in Chinese philosophy history, grounds his theory about original goodness of human nature on psychological components by bringing in something new down ancient ages. Including the principles of virtuous action associated with Confucius to his doctrine, but by composing them along psychosocial development, he theorizes utterly out of the ordinary that makes all the difference to the school. In his argument stated a positive opinion, he explains the method of

forming individuals' moral awareness by means of inseparable integrity of feelings and thoughts, saying human being are born innately good. According to Mencius, heart-mind correlation is the motivational complement of inner incentives. Knowledge and virtue, which are extensions of inborn goodness, comprehended intuitively; then affective motives respond to circumstance, what is learned transmits to cognitive process and eventually behavior emerges. Comparing during the years of Warring State period he lived, in western geography Aristotle, who is one of the pioneers of Greek philosophy, argues deductive and inductive methods in mental activity. On the other hand, Mencius uses analogical reasoning throughout his self-titled work. This essay is an attempt to assert that most postulates of developmental theories, which have been considered an integral part of modern psychology, begin with Mencius in early era. Secondly, this study also aims to discuss the main paradigm of Mencius across emotivist-rationalist opposition, which keeps emotion above thought as well as reason above emotion.

Deconstructing the Struggle Against Nuclearism

Prof. Richard A. Falk
Princeton University, USA

Abstract

In such a complex and uncertain world, it may help to think like a Hindu, and accept contradiction as more in keeping with social and political reality than is finding a right answer to complex policy puzzles. What is almost impossible for those trained within Western frames of reference is to grasp that there are diverse perspectives of understanding that may result in seemingly contradictory recommendations despite shared values and goals. Civilizational perspectives and personal experience inevitably color what we feel, think, and do, and so being likeminded when it comes abolishing nuclear weapons is often coupled with somewhat divergent views on what to advocate when it comes to tactics and priorities.

In this spirit, this paper tries to depict a set of reasons why the goal of nuclear disarmament will never be reached so long as arms control and nonproliferation of nuclear weaponry are seen as the pillars of global stability in the nuclear age.¹

Keywords: nuclear weapon; nuclear disarmament; United Nations; international law.

Introduction

Focusing on points of differing policy emphasis and tactical disagreement, does not necessarily neglect the significance of the similarities that seem more organic and foundational. As I understand these similarities, some main tenets can be identified: the desirability of a world without *any* nuclear weapons to be pursued by way of an intergovernmental treaty negotiated among the existing nuclear weapons states that achieves nuclear zero by stages of successful implementation, a process formally endorsed by non-nuclear states; such a treaty would unconditionally prohibit possession and further development of the weaponry, reinforce existing prohibitions on threat or use of nuclear weapons, and reduce existing nuclear arsenals by a phased, monitored, verified, and implemented procedures with levels of confidence and ample mechanisms for complaint and dispute-settlement; there are many confidence-building steps that could be taken along the way, either unilaterally or by agreement with other nuclear weapons states, including de-alerting of existing weapons, redefining strategic deterrence doctrine in minimalist and purely defensive terms, and adapting doctrine and deployments in accord with a formally declared adoption of a No First Use Policy, supporting the UN Treaty of Prohibition of Nuclear Weapons (TPNW), which entered into force on January 21, 2021.

¹ [For a comprehensive presentation of my approach see Falk, ed. By Stefan. Andersson & Curt Dahlgren, *On Nuclear Weapons: Denuclearization, Demilitarization, and Disarmament*, 2019.

Another area of convergence is with respect to the status of nuclear weapons from the perspective of international law. Most advocates of total disarmament, even if arms control friendly, agree that nuclear weaponry is intrinsically unlawful under existing international law, that is, without the desirable reinforcement provided by the TPNW, and that any threat or use of a nuclear weapon would be an international crime for which accountability should attach. Such a consensus affirms the classic dissenting opinion of Judge Christopher Weeramantry in the Advisory Opinion of addressing the legality of nuclear weapons in the International Court of Justice. [See "The Legality of the Threat or Use of Nuclear Weapons," Advisory Opinion, International Court of Justice (1996); see also *Shimoda* case decided in 1963 by the Tokyo District Court as interpreted, Falk, "The *Shimoda* Case," *American Journal of International Law*, Vol. 51, 759-793]

There is also widespread agreement that maintaining confidence in such a denuclearizing world would require the parallel phasing out of nuclear energy capabilities. Nuclear power facilities as themselves too dangerous to be tolerable, despite those that claim their necessity for realistic project to reduce carbon emissions in accord with the scientific consensus. Events such as the accident at Chernobyl or the tsunami that caused the disruption of the Fukushima facilities are illustrative of the dangers arising from accidents and extreme natural events. Nuclear power plants provide targets for political extremists and disposal of nuclear waste pose major health threats. As well, sophisticated nuclear technology is susceptible to dual use, would feed suspicions that could easily cause disenchantment with nuclear disarmament, and give rise to international tensions, even war-threatening crises. The allegations and conflict potential associated with Iran's nuclear program is indicative of the problems that would face a world monitoring and verifying disarmament commitments where a breakout from an agreement would likely cause dangerous reactions in an atmosphere of geopolitical panic.

The Incompatibility of Arms Control and Disarmament

I have long advocated drawing a sharp distinction between arms control as *managerial* and *geopolitical* in its nature and disarmament as *transformative* and *juridical* in character. By managerial I mean that the primary purpose of a given measure is to reduce risks posed by and costs associated with the nuclear status quo. Typical arms control proposals involve de-alerting weapons systems, agreeing to forego certain modernizing technologies, avoiding provocative doctrines and deployments, and reducing numbers of warheads and missile launchers.

By geopolitical I reference the fact that the intended and actual goal of most managerial initiatives is to add stability to the nuclear status quo, including not challenging the possession, control, and legitimacy of the weaponry as currently exercised by the main nuclear weapons states. An arms control approach also helps explain the priorities

accorded to nonproliferation and counter-proliferation policies as in the dealing by the nuclear weapons states alleged to be a supposed nuclear aspirant as Iran or such a pariah state as North Korea. Indeed, in mainstream media and political discourse the challenge of nuclear weaponry is reduced to strengthening, stabilizing, and enforcing the nonproliferation regime, and nuclear disarmament is clearly struck from the policy agenda of the nuclear weapons states.

My view is that the endorsement of arms control approaches subtly and indirectly substitutes management for transformation, and leaves the world facing unacceptable risks of intended and unintended uses of nuclear weapons for the indefinite future, as well as 'the nuclear apartheid' structure of allowing possession, development, and deployment by the nuclear weapons states and prohibiting it for all others. Beyond this, it overlooks the cultural and collective legal/ethical/spiritual (normative) costs associated with deterrence strategies that regard retaliatory uses of nuclear weapons as a legal and ethical security policy despite their indiscriminate, toxic, genocidal, catastrophic, and possibly omnicidal characteristics. [E.P. Thompson, "Notes on Exterminism: The Last Stage of Civilization," *New Left Review*, May/June, 1980.]

Geopolitical factors are not generally considered in discussions of these issues, but given my world order interests I regard geopolitics as subverting the major premise of state-centric world order, namely, the equality of sovereign states.[UN Charter, Article 2(1): "The Organization is based on the principle of the sovereign equality of all of its members."] Of course, this formulation in the UN Charter is mendacious language that cannot be reconciled with the P-5 permanent membership and right of veto in the Security Council. A prime ingredient of national sovereignty is the unconditional authority of states to determine their own security policy when it comes to self-defense, especially in response to threats. The irony of the managerial approach is that the two states with the most plausible security justifications for recourse to nuclear deterrence, Iran and North Korea, are the only states under pressure to forego or renounce all intentions of acquiring such weaponry. Even worse, this policy of denial is not a decision of the world community at the UN. It is a self-serving policy articulated by the nuclear weapons states, especially the United States, the UK, and France, geopolitical players that have assumed the role of nuclear gatekeepers while keeping their own nuclear options discretionary and secret. Instead of juridical equality, nuclear weapons policy is geopolitically hierarchical.

I acknowledge that drawing this sharp line between arms control and disarmament has some drawbacks. Perhaps, the most important of these is to make the goals of anti-nuclear activism seem unattainable and utopian because of the weak political will present to challenge the nuclear status quo, a political reality that has persisted since 1945 without any further weapons use. It can be argued in favor of arms control, that its measures are inherently valuable, and raise the anti-nuclear morale by demonstrating

that concrete steps can be taken to reduce overall risks and costs of nuclearism, that something positive is happening in response to these concerns. Further, that when and if a more peace-oriented political atmosphere emerges, it would be a simple matter to advocate total nuclear disarmament, and on this basis strengthen the political will to encourage political leaders that the time has come to pursue transformative initiatives. In effect, as matters now stand, arms control seems better than nothing, and in this period, it is prudent to get what is possible, while maintaining the expectation that at some time under conditions impossible to anticipate, nuclear disarmament would rise to the top of the political agenda.

I entertain these expectations to a certain extent. I continue to hope that a transformative agenda will at some point (other than a post-catastrophe context) be supported by an insistent public opinion and by responsive political leaders. In the 1990s I had the hope that at the end of the Cold War, especially as coupled with the collapse of the Soviet Union, there would be an irresistible surge of support for seeking nuclear disarmament. After all, political events had undermined the main deterrence rationale for retaining and developing the weaponry, and there seemed no reason to retain such potentially catastrophic weaponry. I thought both leaders and citizens would seize the opportunity to work toward a nuclear-free world. Sadly, it didn't happen, and was not even seriously considered. There was no push from below, and no interest from above. We should all be asking ourselves why such a mood of nuclear complacency prevailed when there seemed so much to gain by working toward an attainable and historic agreement to rid future generations of the fear that somewhere, somehow this infernal weaponry would again wreak havoc. One part of an explanation is that the nuclear dimension of the militarized bureaucracy in the United States, and elsewhere, is sufficiently influential to inhibit any concerted political moves to rid the world of nuclear weaponry.

I want to stress my perception that the driving force behind arms control is to enhance the *stability* of the nuclear environment and save money. In my view, foregoing certain nuclear innovations and deployments makes nuclear disarmament seem less necessary rather than more attainable. In this regard, arms control falls within the domain of political liberalism, which is itself under attack from neoconservative militarists who regard any international arrangements designed to reduce the risks associated with nuclear weaponry as a snare and delusion, and definitely not in the national security interest of the United States, and maybe some other nuclear weapons states.

Such a mainstream debate on the pros and cons of arms control needs to be understood as most essentially about the managerial form. The geopolitical hawks are arguing in favor of *national* management of nuclearism with due regard for the pursuit of strategic national interests. Most liberals favor negotiated *international* management arrangements that limit geopolitical options, including the avoidance of nuclear arms

racess. Arms control liberals also seek to minimize costs and risks of the nuclear status quo, giving a strong priority to keeping the nonproliferation regime alive and well. The most idealistic arms controllers feel that success with partial measures would build confidence of governments needed to take more ambitious denuclearizing steps in the future.

As suggested, my divergence of views with arms control advocates can to some extent be regarded as complementary rather than posing an either/or choice.[Falk/Krieger, *Path to Zero; Dialogues on Nuclear Dangers* (2016).] I regard it as useful to understand that arms control generally tends to work, at least for the foreseeable future, against rather than in support of nuclear disarmament. I understand Krieger and other nuclear zero advocates to be suggesting that while abolition is the primary goal, during the foreseeable it is desirable to do whatever becomes politically feasible by way of reducing risks and costs associated with the existing nuclear arms environment. This outlook may help explain why some of those dedicated to nuclear disarmament are nevertheless reluctant to make the point that while a given arms control measure may be a constructive contribution in some respects, it has the unacknowledged effect of moving the world further from nuclear disarmament rather than closer to it.

In both positions there is considerable room for convergence. Krieger's position does not oblige him to regard every arms control measure under consideration as beneficial, nor am I committed to rejecting automatically every arms control measure that comes along. For instance, I am aware that we would both favor a declaratory No First Use policy either unilaterally undertaken or adopted by agreement among nuclear weapons states. Contrariwise, we would likely both oppose an international agreement that permitted the development of defense systems that would have the likely effect of making First Strike Options more attractive while claiming to make a rogue surprise attack less likely.

I do feel strongly that we who seek permanent nuclear peace need to understand that the denuclearizing struggle must confront the bipartisan national consensus on these issues in the United States, which has survived without controversy despite the end of the Cold War. The consensus holds that the existing nuclear weapons regime needs to be managed, but never disassembled. The consensus is split as to who should do the managing, and what should be the role of geopolitics in the overall scheme. It regressively excludes from political imagination any endorsement of nuclear disarmament as a matter of principle. The Statement of US, UK, and France expressing their reasons of these governments for rejection of TPNW makes this clear. The main contention of this Statement is that even after the Cold War nuclear weapons enhance national security rather than erode it. By such reasoning, all sovereign states should have a legal entitlement to acquire the weaponry, and hence it becomes reckless for a government not to become a nuclear weapons state, exercising their right of withdrawal from the NPT.

The Normative Ambiguity of Non-Proliferation and Counter Proliferation Policies

As earlier indicated, the geopolitical essence of the managerial approach is shaped by the nuclear governmental oligarchs rather than by the world community as problematically represented by the UN. In other settings. I have argued that the weakness of community at the global level makes it unrealistic to expect the UN to be effective or even influential whenever a policy issue collides with geopolitical interests. This difficulty was compounded by vesting veto power in the governments of the first five states to acquire nuclear weapons. In other words when it comes to matters of peace and security geopolitics has been written into the constitutional fabric of the UN System with juridical considerations based on sovereign equality put aside at least so far as the Security Council is concerned.

To achieve a world order bargain, a deal of sort was struck, and incorporated into the text of the NPT. Non-nuclear states would receive the technology needed for what was put forward as a good faith pledge would be written into the treaty obliging the governments of the nuclear weapons states to seek nuclear disarmament through international negotiations, and even more ambitiously, general and complete disarmament.[See Articles IV, VII NPT] This tradeoff was flawed in conception and execution. It was flawed because it was based on vague and unmonitored commitments that were almost impossible to interpret, much less implement. It was flawed in practice by discrimination among states, by facilitating covert acquisition of nuclear weapons by Israel, while waging an aggressive war in Iraq that was partly justified on counter proliferation grounds and subsequently relying on irresponsible coercive diplomacy to threaten Iran and North Korea with potentially grave repercussions.

The fundamental flaw of the approach taken in the NPT became increasingly evident over time. It became clear that the nuclear weapons states without exception were not interested in pursuing nuclear disarmament as policy objectives. Occasionally, politicians would put forward their belief in nuclear disarmament. But it was at best an empty wish that lacked political traction, and at worst was a public relations stunt used to gain a propaganda or partisan advantage.

Should the NPT be repudiated in view of the flagrant breach of Article VI by the nuclear weapons states?

The issue of nonproliferation is central to my understanding of the challenge of nuclearism.[See Robert J. Lifton & Richard Falk, *Indefensible Weapons: The Legal and Political Case Against Nuclearism* (1982)] It is central because the establishment of a nonproliferation regime is what has linked geopolitical interests to the retention of nuclear weapons by a small number of countries, above all the five permanent members of the UN Security Council. It sets these five states apart even in relation to the other four nuclear

weapons states for whom the weaponry is more closely connected with a more specific search for security, status, and regional influence (Israel, India, Pakistan, and North Korea). I believe it is important to expose these unacceptable geopolitical links between nuclear weaponry, nonproliferation, and world peace and security. Liberal anti-nuclearists are either take no notice of these geopolitical dimensions of nuclear policy, and tend to support the nonproliferation regime based on their assumption that the world becomes that much more dangerous as each new political actor acquires nuclear weapons. To take note of the problem is a far cry from finding a solution.

As with arms control, the policy issue raised by nonproliferation is complicated, defies any dogmatic view, and cannot be resolved by rational analysis or even by recourse to moral and legal considerations. I share the view that any sane person would like to live in a world with as few governments having access to nuclear weapons as possible. Seen in isolation, this is a desirable goal. But just how desirable is nonproliferation policy if other considerations are taken into consideration? Among these considerations is the realization that incentives to seek nuclear disarmament are greatly diminished if the nuclear club can be kept small as it allows the nuclear weapons states to retain their security options and geopolitical status associated with the possession of the weaponry, as well as to threaten other states with annihilation without fearing retaliation.

Another important consideration is the distinction between the nonproliferation treaty instrument (NPT) and the implementation of the treaty by way of the establishment of a *nonproliferation regime* (NPR) devised by and under the control of the United States, and not the UN. Note that the NPT purports, at least, to be based on the formal equality of states, and supposedly relied on a logic of reciprocity with respect to obligations. The nonproliferation regime, in contrast, proceeds from assumptions of inequality, claiming for nuclear weapons states a responsibility for preventing or even reversing proliferation, while imposing no denuclearizing responsibilities on any nuclear weapons state except possibly North Korea. In this sense, due to geopolitics, nonproliferation rather than denuclearization becomes the operative manner of partially integrating or normalizing the weaponry with respect to world order. This means that geopolitics is given precedence over international law and global justice, and few seem to notice, and even fewer appear to care. By treating nonproliferation as independent from the broader issues of peace and justice, the nuclear policy question is reduced to whether if country X acquires the bomb will the world or region be safer or more dangerous. This kind of reasoning has provided the justification for insisting that Iran demonstrate to the world that it does not possess nuclear weapons, and is not seeking to produce despite its technological capacity and infrastructure that confers the potentiality. Geopolitical prerogatives authorize the nuclear weapons states to overlook the unlawfulness of threats to the security of these potential proliferators that seem to explain their temptations to develop a nuclear weapons capability.

There are further concerns about burying these issues beneath the banner of national nuclear bipartisanship.[By bipartisanship I am referring to the consensus that has generally transcended party differences in the formulation and carrying out of foreign policy, including adherence to the logic of nuclearism, which includes the management of the counterproliferation regime.] For one thing, the counterproliferation regime tacitly authorizes threats and uses of force to carry out its nonproliferation missions. Such threats and uses of force have been relied upon to uphold to case for attacking and occupying Iraq since 2003 despite the refusal of the UN Security Council to accept the argument or authorize the undertaking. Since this undertaking could not be validated by reference to self-defense as defined in Article 51, it must be considered a violation of the core norm of the UN Charter (Article 2 (4)) and thus appears to qualify as a war of aggression, which was treated as the most severe of international war crimes at the Nuremberg trials held after World War II as well as being a damaging show of disrespect for the authority of the United Nations given that authorization was requested and denied. The same dynamic is at play with regard to Iran at the present time. Threats and sanctions, without any UN authorization have been directed at Iran, a state that seems at the mercy of geopolitical instability, further accentuated by Trump irresponsible repudiation of the Joint Comprehensive Plan of Action (JCPOA) negotiated during Obama's term as president. The main conclusion to be reached is that implementing nonproliferation has been achieved at the expense of international law and even the UN Charter, and by relying on a one-sided interpretation of the NPT that grants impunity to the nuclear weapons states while enacting unlawful punitive measures against non-nuclear states, especially those that are targets of geopolitical enmity. My impression is that advocates of continuing validity of the NPT arrangement are insensitive or ignorant toward this double standard relating to compliance.

A second intrusion by geopolitical manipulation is the manner in which countries outside the P-5 are treated when it comes to nuclear weaponry. It seems evident that Israel was given entry to the club despite its covert means of acquiring the capability, even receiving secret technological assistance from several P-5 nuclear weapons states. Whether by agreement or choice Israel has maintained a formal posture of neither admitting nor denying the existence of its weapons arsenal, although it is widely accepted that it possesses the weaponry and continues with further development activities. [Seymour Hersh, *The Samson Option: Israel's Nuclear Arsenal & American Foreign Policy* 1991] What is clear is that the NPR discriminates among states based on their international alignments and size, allowing Israel in, while keeping Iraq and Iran out. This discriminatory practice illustrates the geopolitical tendency to divide the world into friends and enemies when allocating rights and duties among sovereign states. In other words, geopolitical rather than legal criteria are relied upon to establish the policy interface between nuclear haves and have nots.

A third intrusion is the effect of allowing the NPR to override the treaty without any attempt at reconciling the two sources of normative order, or even to alter the NPT so that it conforms to the practices of NPR. The NPT imposes a solemn obligation on nuclear weapons states to pursue nuclear disarmament in good faith with an intention to conclude an agreement. [See unanimous finding of ICJ in the Nuclear Weapons Advisory Opinion. The language used by the 14-0 vote, which included the American judge, is suggestive: "There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control." The finding in the Advisory Opinion follows closely the wording and spirit of Article VI of the NPT: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."]

These states are parties to the NPT, and yet they have joined in the virtual negation of this most fundamental feature of the treaty text that undoubtedly explains the willingness of most non-nuclear states to become parties to the treaty. We can only speculate as to whether the NPT would have ever come into force without having this reciprocal feature that bound the two states in an encompassing agreement. The NPT seemed to have the intrinsic merit of seeking to rid the world of nuclear weapons by negotiation while freezing nuclear membership. The treaty has been reasonably successful in inhibiting further acquisition of this highly dangerous and legally dubious category of weaponry, while being an unacknowledged failure so far as its reciprocal goal of denuclearization.

In the end, this double standard raises the question as to whether the NPT should be repudiated, or at the very least subjected to sharp criticism by non-nuclear parties. From a legal point of view the nuclear weapons states appear to have violated material provisions of the treaty, giving non-nuclear parties an option to void the agreement. As matters now stand, the NPT provides a legal rationale for the claims put forward by the NPR. Yet the repudiation of the NPT could be interpreted as a green light to acquisition of the weaponry as an insurance policy. In view of such a dilemma, the best response might be a heightened effort to apply the treaty as drafted, especially insisting on compliance with Article VI, and further construed by seeking a second Advisory Opinion from the World Court.

The NWPT is another sort of pushback against both NPT and NPR, as well. It obviously challenges the legality and legitimacy of the geopolitical nuclear apartheid as pertains to the control of nuclear weaponry by putting forward a treaty seeking a wide-ranging normative prohibition of nuclear weaponry that is applicable to all states.

Alongside concerns about proliferation is the absence of concern in response to the maneuvers of geopolitics as these bear on the sovereign right of states to uphold their security and to exercise their inherent right of self-defense. Actually, Iran and North Korea have far more reasonable security arguments for acquiring nuclear weapons than do any of the other nuclear weapons states. This recognition does not justify acquiring the weaponry, but it helps explain the reasonableness of their behavior as compared the examples being set by leading states. Such vulnerable states are faced with defending their territorial sovereignty against coercive diplomacy and possible interventions and encroachments on their security carried out and promoted by neighboring political actors controlling vastly superior military forces, and in these instances allied with nuclear weapons states.

By this pronounced unwillingness of the NPR to allow certain states to determine their own security needs if it undermines efforts to prevent further proliferation, unaccountable and often irresponsible geopolitical managers of NPR are effectively given the authority to override national security policy of these weaker states. For instance, Iran is threatened with military attack if it crosses certain technological thresholds. As significant, geopolitical forces make no effort to take steps to reassure Iran with respect to security or to replace a nonproliferation approach by pushing for the establishment of a Middle East Nuclear Free Zone. There has been no response by the West to Iran's president, Hassan Rouhani, who presented a peace plan for the Persian Gulf in 2019 at the UN General Assembly, given the name Hormuz Peace Endeavor with the fitting acronym of HOPE.

The example of Libya haunts this topic of forgoing the nuclear weapons option, as many believe that if Muammar Qaddafi had not abandoned plans to acquire nuclear weapons, he would be alive today. Similarly, if Saddam Hussein had really possessed a stockpile of weapons of mass destruction, many believe that Iraq would never have been attacked in 2003. In other words, nuclear deterrence is possibly a more effective approach to national security if invoked by relatively weaker nuclear states. The NPR offers no compensatory steps to offset security concerns of such obviously vulnerable states as Iran beyond their rather tenuous conditional willingness to remove sanctions, and thus it is not surprising that nonproliferation is tied to militarism.

It is also notable that the most prominent instance in which hawkish foreign policy establishment figures advocated nuclear disarmament was in reaction to their skepticism about the viability of NPR in containing future proliferation. [George P. Shultz, William Perry, Henry Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, Jan. 4, 2007; see by same authors, "Deterrence in the Age of Nuclear Proliferation," *WSJ*, March 7, 2011.]. In effect, these geopolitically oriented political figures, influential former holders of high-profile security positions, favored nuclear disarmament not because of any moral scruples or fear of an impending apocalypse, but because of their worries that the NPR was breaking down.

In effect, their belief that further proliferation would likely occur, and make it so much more difficult to achieve geopolitical political goals that they were uncharacteristically willing to recommend phased denuclearization as a grand strategy. They did this in the belief that the West would enjoy military dominance in a denuclearizing world through their retention of far superior non-nuclear capabilities, which were in any event, more usable in the course of foreign policy if there seemed to be no risk of an unwanted escalation above the nuclear threshold. I believe these complexities need to be discussed, while arms control proponents tend to believe that such issues are often 'academic' distractions that fail to keep the proper focus on what is wrong about the weaponry and how to get rid of the weapons before they get rid of humanity.

Can we have Stage III nuclear disarmament without non-nuclear demilitarization?

A final issue touched upon is whether a credible posture toward a disarmament process for nuclear weapons must at some stage also address issues relating to non-nuclear demilitarization, and indeed war itself. Arms control oriented thinkers stresses more than I would the distinctive policy priority arising from the acute dangers posed by nuclear war. Those that favor nuclear disarmament stress the obstacles to nuclear disarmament created by existing levels of militarism as well as by the role of war in international relations and as embedded in the political realist mentality that continues to regulate the behavior of national leaders.

There is a practical argument about inducing the weaker nuclear states to enter into a treaty framework that leaves them more vulnerable after giving up their arsenal of nuclear weapons. The governments of such states to the extent that their leaders believe that exposure to hostile states wielding superior conventional weaponry would discourage any effort to tamper with the nuclear status quo. Such security minded states likely include Pakistan, Israel, North Korea, and possibly India (in relation to China).

As a nuclear disarmament process deepened, there would be more attention given to a denuclearizing security environment. To achieve the goal of total abolition, the only acceptable outcome of a denuclearizing process, parallel steps would need to be taken to reduce non-defensive armaments, which might be difficult with the emergence of drones and accurate long-range missile technology.

Concluding Note

Some anti-nuclear moderates believe that the most promising way to reach a world without nuclear weapons is to convince society that fears of a nuclear war are well-founded, that the results of a war fought with nuclear weapons would be unimaginably horrible in its devastation and aftermath, and that phased, verified

nuclear disarmament offers a safer and more humane alternative that would give permanent nuclear peace its best chance. [See Daniel Ellsberg, *The Doomsday Machine: Confessions of a Nuclear War Planner* (2017)]

I do not agree. In contrast, I am convinced that to move forward toward total nuclear disarmament we need to take much better account of the obstacles, frictions, and nuances, explaining why the anti-nuclear movement has so far failed to challenge effectively the nuclear weapons establishment. This position is open to criticism as being overly concerned with obstacles, and less focused on issues of morality, prudence, political action, and war prevention (relating to the implicit arms control claim that nuclear deterrence has prevented all major wars for more than 75 years, including those that might have been fought had nuclear weapons not existed).

In the end, I think we need to continue to have dialogues between those anti-nuclearists who are uncritical about the friction between pursuing arms control and disarmament, and those who believe that their antagonisms must be addressed. It remains crucial to keep mobilizing moral outrage as the foundation for political action. By contrast, I believe that ant-nuclearism will not get far until it clarifies the tensions between seeking arms control and favoring nuclear disarmament. It seems a serious confusion to suppose that arms control is a halfway house and a serious moral and political failure not to critique the nonproliferation regime that sustains nuclear apartheid which is self-servingly asserted to be the only path to global security. [See George W. Bush, U.S. National Security Strategy, 2002, an important interpretation of global security that fails even to acknowledge nuclear disarmament as a desirable goal].

My assessment of the arms control/disarmament interface can be summarized in a series of propositions:

- that it is morally, legally, politically, and prudentially imperative to rid the world of nuclear weaponry through a verified nuclear disarmament treaty and accompanying implementation regime, and this should be regarded as the paramount goal of anti-nuclearism, taking precedence over other goals;
- that arms control approaches must be explicitly understood as *managing* nuclear weapons, which is often not consistent with achieving the paramount goal, and may actually make the goal of total nuclear disarmament less attainable;
- that the two top priorities of the managerial approach to nuclear weaponry are to prevent a major war and to prevent further proliferation of nuclear weaponry to additional sovereign states, and especially to those potential nuclear weapons states that have adversary relationship to regional and global geopolitical regimes;
- that despite the NPT, avoiding further proliferation of nuclear weaponry requires reliance on implementation by geopolitical regimes, by threats, and if necessary, by military action;

- that the coercive maintenance of non-proliferation has produced a structure of nuclear apartheid, which is inconsistent with the world order premise of the equality of sovereign states and will be resisted from time to time by states whose security is under threat or who harbor hegemonic ambitions;
- that the final stages in any disarmament process must also address global militarism in general and reduce non-nuclear military capabilities;
- that overcoming current high levels of complacency about the risks and effects of a nuclear war will depend on civil society activism and a more peace literate public opinion, and will not be achieved by normal diplomacy.

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China's innovation-based approach in the fight of Covid-19¹.

An estimation of China's impact for global health to come

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Abstract

When the infectious coronavirus SARS-CoV-2 broke out it resulted in a global crisis. In the fight of Covid-19, China's government relied on its strength to apply new technologies, i.e. for controlling and containment of the virus by tracing and tracking Chinese citizens. Relying on the trajectory of industrialisation, China has pursued a path of innovation. While it is reasoned that China's advantage might have origin in the experience of the SARS outbreak almost two decades ago, this article argues that mainly China's innovation- driven climate has favoured the application of new technologies in combatting the current crisis. Based on the innovation-driven trajectory this article explores China's pathway out the corona crisis and how this might strengthen China's role in global health governance. In order to pursue this aim, this article explores several areas, in which the next generation of technologies, such as AI-based diagnostic or intelligent robots were applied and concludes with an outlook based on the formulated political agenda, strategic considerations and initial international cooperation regarding China's impact for global health.

Keywords: Innovation; Covid-19; Healthcare; intelligent robots; telemedicine; Artificial intelligence; China.

Introduction

The outbreak of the infectious coronavirus SARS-CoV-2 led the world into a global crisis. This on-going pandemic crisis poses a health threat to people around the world and requires governmental action. The harsh reaction of the US government to terminate membership of the World Health Organization (WHO) showed the global importance of health policy and has thus possibly left a power vacuum in times of crisis that has become a window of opportunity for China's government to strengthen its emerging role in the world health sector. As assumed by experts from *Foreign Affairs* this decision of the US-administration under former President Donald Trump (*1946-, 2017-2021) gave China's government the necessary leeway to maneuverer

¹ The author presented parts of the present text at the annual conference of the DVCS held on 13. November 2020 (Zürich/digital) on the topic "Innovativ aus der Krise" (German), which will be submitted for the annual Conference Yearbook under the title "Innovativ aus der Krise – Wie China mit Innovationstechnologien der Coronakrise beugen (German, forthcoming).

for International Leadership by propagating to “a global audience of the superiority of Chinese efforts and criticizing the ‘irresponsibility and incompetence’ of the ‘so-called political elite in Washington’” (Campbell/Doshi, 2020). The innovation technology-driven approach of the People’s Republic of China (PRC) to react on the infectious virus became a factor in the competition of systemic rivalry. Thus, the global corona crisis has not only represented a challenge to security and health policy, but has also created an opportunity for China to influence global health governance. In the context of system rivalry, the connection between innovation and political influence is said to grow stronger in the Age of Digitalisation (Yan, 2020). That begs the question of how did this innovation-driven pathway facilitate China’s way out the corona crisis and how might this strengthen China’s impact on global health governance?

Being a pioneer in digitalization and innovation-driven development, China’s government relied on its strength to quickly apply new technologies in fighting the novel coronavirus. After decades of industrialization, the age of digitization has brought about new technologies, which seem to be the realization of the SCI-FI ideas from the 1970s. While the on-going development exceeds all expectations, the perfected robot soldier wouldn’t probably come as a surprise at all. Needless to say, the digital transformation of society has already entered the way of living far beyond military means. Over the last decade, headlines reporting the merit of intelligent robots in medical diagnostic and treatment equipped with remote control and high-end sensors for navigation have increased.² Yet, China’s pioneering role is not a coincidence: It is based on a clearly formulated agenda, such as the New Generation Artificial Intelligence Development Plan (*Xin yidai rengong zhineng fazhan guihua*, AIDP)³ that was launched in 2017. As the spread of the newly outbreak of SARS-Cov-2 progressed, China’s State Council issued in June 2020 the action plan “Fighting Covid-19” which, in addition to conventional control methods, also favoured the application and development of technological solutions.⁴ Although the challenging experience of SARS almost two decades ago has created an advantage, this article argues that it is mainly China’s innovation-driven climate that has benefitted the application of new technologies in combatting the current crisis. Relying on the trajectory of industrialisation since the 1980s, China pursued the path of innovation for a future-oriented development.

Political science research forecast mixed effects from autocratic regimes and Innovation policy. Based on the theoretical assumption that autocracies provide a systemic advantage in innovation politics and the proclaimed increase of systemic rivalry in regard of digitalization,⁵ this paper seeks to explore the impact of innovation

² See for example the media coverage at The Robot Report at <https://www.therobotreport.com/chinese-xiaoyi-ai-platform-passes-national-medical-licensing-tests/> [Accessed 15.06.2021].

³ See the fulltext at http://www.gov.cn/zhengce/content/2017-07/20/content_5211996.htm [Accessed 18.05.2021].

⁴ The State Council Information Office of the People’s Republic of China. 2020. *Fighting Covid-19 China in Action*.

⁵ (Yan Xuetong 2020)

politics in the field of healthcare. In contrast to avoid societal risk, China's autocratic regime might be prone to apply new technology solutions for filling the gap of input legitimacy by output legitimacy (Buzogány et al., 2016) and by doing so increase their global reputation. Hence, this paper assumes that, as challenging as it is, the innovative pathway to combat the corona crisis also harbours the opportunity for China to influence global health policy and governance in the not so far future.

Taking the current corona crisis as an example, this article pursues an explorative approach to map fields of influence in the intersection of new technologies and medical health services beyond the institutionalized framework of the World Health Organization (WHO). In order to pursue this aim, this paper is structured as follows: first, the paper outlines the theoretical context of how innovation politics links to the systemic rivalry. Second, to display the innovation-prone environment, this paper summarizes China's trajectory of innovation-based solutions regarding the support/pathway of new technology agenda in general and in the subsection of healthcare in particular. Under the impression that the current corona crisis boosted the even more rapid implementation of new technology in fighting the infectious virus outbreak on behalf of the advantage in digitalization, a third section follows to explore those new technologies that were applied during the combat of Covid-19. The analysis focuses on three examples, i.e. telemedicine, AI-based image diagnoses and the use of intelligent robots. In order to estimate the outreach of China's governmental prescribed innovation-prone agenda to the global health politics beyond the setting of the WHO, this paper follows to outline the political agenda setting by analysing three scopes: first, the governmental guideline as formulated in the "Fighting Covid-19 China in Action", second, the expressed claims of the CIIS to (academically) support China's strategic agenda, and, third, international cooperation that show initial implementations of China's "Maneuvering for International Leadership".

System Rivalry and Autocratic Advantage: Frog leap to the Future?

In midst of the global corona crisis the Tsinghua based IR scholar Yan Xuetong published the paper "Bipolar Rivalry in the Early Digital Age" (2020). He argues that the driving force between the United States and China is the new digital dimension of strategic competition rather than the ideology during the Cold War. Yan grounds his argument on the development of digital technology that has created new ways of protecting national security, that also benefits the accumulation of national wealth, and furthers to obtain international support. He states that, "Ideology can no longer serve as a political base for strategic cooperation as it did during the Cold War" (ibid. p. 322) but that "future advances in digital technology will boost the influence of digital mentality on foreign policy-making in the emerging bipolar world" (ibid. p. 323). Hence, it is the digital economy that will become "the main engine of the global

economy” (ibid. p. 323) and with it the advantage in digitization, by i.e. rapidly applying new technologies for solving social problems. Therefore, this will most likely pose as a game changer in the race for international competition. In particular, when it is being linked to the paradigmatic turn in global health dynamics, where the causal connection of wealthier means healthier inverted to ‘healthier is wealthy’ (see Sparke, 2018; Pritchett / Summers, 1996). This turn emerged in the debate over the last decades and supports the importance of the intersection of new technologies on developmental advantages and medical health services to this bipolar rivalry and corroborates this research approach.

Innovation is not an end in itself but serves to solve problems. The current crisis is a health problem and social challenge. Leitner and Wegner (2019) argue “solving societal problems is becoming an important motivation for conducting research and innovation, for companies and research-performing organisations, as well as for individuals” (2019, p. 227). In that spirit, combatting the outbreak of the infectious coronavirus provides not only a health problem but also such a social problem to solve. In general, innovation systems are also in need for a favourable climate of scientific autonomy, intellectual openness and creativity combined with a reliable institutional framework. Yet, being an autocratic regime by comparison, this is not the expected strong suit of the Chinese Party-State. However, China’s current government managed to increase its modernity of the innovation system in international comparison over the last decade (2010-2020) by over 1,6 as the recent published evaluation by C. Textor on statistica.com showed.⁶ Although, China’s innovation system is still ranked 2 points below average, the government is promoting innovation technology, such as AI-based facial recognition in traffic and by doing so intruding comprehensively in all aspects of living (see Andersen, 2020; Drinhausen /Lee 2021, p.43-45). Empowered by the political agenda that will change the *Lebenswelt* (as in living environment) dramatically and possibly create new societal problems to solve.

According to Buzogány, Frankenberger, and Graf (2016) autocracies even have an advantage in the field of innovation policy. In the study on policy-making and legitimation in autocracies, the authors outline autocratic legitimation strategies in innovation policy and distinguish between three possible sources of legitimacy in the policy process: input, throughput and output. One of their findings is that authoritarian regimes can increase their throughput legitimacy by involving regional actors into the political system (ibid. p. 273). In addition, they figure that the PRC in particular, seems to benefit from the regional differences by facilitate the involvement of large non-state actors or even large state-owned enterprises they try to allow

⁶ See the illustration and description to the score that ranks from zero (low innovation) to ten (high innovation) which places China two points below average at position 11th after Japan (6.43), UK (6.18), US (5.54), Germany (5.52), South Korea (5.27), France (4.1), Australia (3.66), Italy (2.87), Canada (2.87) and Spain (2.6) at <https://www.statista.com/statistics/1274633/china-innovation-system-modernity-in-international-comparison/> [12.11.2021]

competition to emerge (ibid. p. 273). They conclude that autocracies can reinterpret policies in terms of maintaining power and stylise themselves as successful problem solvers and innovators, e.g., by selling large-scale infrastructure projects as a “leap into the future” (ibid p. 276). Yet, innovation policy in particular requires a great deal of flexibility and careful modelling of the throughput dimension of autocracies (ibid. p. 276). Therefore, the research interest focuses on China's innovation trajectory and how the government reacted during the crisis in regard of the application of new technologies.

Based on this theoretical perspective, this paper outlines China's innovation-prone trajectory in order to explore the benefitting framework of China's innovative pathway to combat the corona crisis with regard to the intersection of new technologies and medical health care. In doing so, it seeks to identify possible angles that support China's emerging role in global health and harbour the opportunity for China to shape global health policy and governance in the near future.

China's Trajectory for Innovation-based Solutions

China's government embarked on the innovation pathway for new technologies long before the infectious lung disease broke out. In fact, it seems to be the reasonable continuation of the reform and opening-up policy that was introduced in the late 1970 under Deng Xiaoping (1904-1997). When China set sail for an innovation-prone future, the main concern was to develop industry in order to be on par with the industrialized world. The technological development has become a core driver for the peaceful development path (Zhang/Feng, 2019). In the course of the 1980s and 1990s political measures were introduced, such as the “Golden Projects” (*jin gongcheng*) and institutions were founded, including the establishment of the Ministry of Information Industry, which was later succeeded by the Ministry of Industry and Information Technology (*Gongye he xinhihua bu*, MIIT, 2008). The 2006 Science and Technology Plan aimed to promote domestic innovation and to gain the greatest possible technological independence. According to Alberto Gabriele, technological progress has become one of China's most crucial areas to fulfil the development strategy and thus “it is necessary to attach the highest priority to foster a very sustained growth of R&D investment and to develop an advanced NIS [National Innovation System], capable to go beyond mastering and absorbing Western state-of-the-art technologies and to successfully engage in generating indigenous innovation” (Gabriele, 2020, p. 165). Hence, China's leadership has promoted new technologies and has furthered it by lavishing significant financial support.

Artificial intelligence (AI) will become the most forward-looking new foci of international competition. Because China's situation of national security and international competition is getting more complicated “One must look at the world, put the development of artificial intelligence at the national strategic level, systematically

deploy and plan actively” (The State Council 2017), states the New Generation Artificial Intelligence Development Plan (*Xin yidai rengong zhineng fazhan guihua*, AIDP). China’s State Council published the AIDP in August 2017. The novelty of AI development and the importance of AI for international competition both are highlighted directly in the description of the strategic situation. According to AIDP, AI is not just triggering a new round of international Science and Technology (S&T) competition, becoming the core driver for a new round of industrial transformation but will also create the most significant competitive advantage regarding the strategic international situation. The acceleration of AI-technology is not only linked with finding technological-driven solutions for social problems and to sustain development, but also to fulfil the promise and regain former international glory. Yet, the broad use of technology that apply artificial intelligence is estimated to be a disruption to future societies (Girasa, 2020). Therefore, as a disruptive technology (*dianfu xing jishu*) AI-technology might most likely play the key game changer due to its comprehensive areas of application to social development and digital transformation alike (ibid, p. 24-67). In doing so, it can also lead to a change in the global balance of power (see Yan 2020). Hence, China has enhanced its prospects to become the world leader of AI.

This brief outline illustrates China’s prevailing climate for promoting the development of innovative technology in order to meet new political challenges. The most important drivers for China’s innovation-prone development are future technologies, such as smart, intelligent and data-driven (information) technologies. Yet, in 2018, President Xi emphasised China’s science and technology sector problems. He pointed out the lack of innovative ability (*chuangxin nengli*), resource allocation (*ziyuan peizhi*), structure and politics (*tizhi zhengce*). Most importantly he claimed: “China lacks basic research and breakthroughs” and as a matter of fact, China “lacks of original knowledge” (Xi, 2020). The bottom line was, that the overall situation is not yet good enough and the interaction of the individual components is also not yet sustainable. In particular, “the global cooperation is not yet sufficient, the S&T skills are not yet strong” (Ibid.). Hence, the goal of establishing a *shijie keji qiangguo* – a science and technology superpower– has not yet been achieved. However, with the goal in mind to become the next *shijie keji quanguo*, “we have to advance the S&T sector in order to become “the world’s largest science centre and innovation country” (ibid.).

Although, like Xi, specialists often have highlighted China’s need to catch up, the previously taken course showed promising effects. As a result of the massive investments in research and development (R&D), for example, Chinese patent applications increased (see Wipo.int, 2020). One of the main requirements in order to become a science and technology superpower is suffice infrastructure. China’s global networking agenda includes not only the connectivity of train stations and harbours, but also the fast development of powerful physical data routes for digital transmission.

In 2018, the launch of the ‘digital silk road’ (*shuzi sichou zhi lu*) contributed to that cause and consolidated the government’s outward-looking digitalization strategy. As a matter of fact, powerful servers and data storage facilities are essential for operating big data and AI-based applications, which also became obvious in dealing with the corona crisis.

China’s government has pursued a trajectory of an innovation-prone pathway for addressing societal challenges and problems. Expanding the infrastructure for e-governance (see Drinhausen/Lee 2021, p. 41-42; Chen/Göbel, 2016) counts to this trajectory as much as the most prominent example of the implementation of the social credit system for tracking and rating social behaviour (see Meissner, 2017; Kostka, 2019; Ohlberg, 2019).⁷ This reflects China’s approach to pursue a leadership role in global health. In the last decade, China not only desires to become a digital leader in S&T, but also increased its global responsibility as a public health provider (see Freeman III, 2011; Pak K Lee, 2014). In summer 2018, China and the WHO expanded their strategic partnership. On behalf of the Chinese Government, Minister Ma Xiaowei of the National Health Commission signed a letter of intent to expand global collaboration in malaria and schistosomiasis, and agreed to increase the number of dispatched health professionals seconded to WHO.⁸ According to that web-entry, the Director-General Tedros Adhanom Ghebreyesus said that China’s domestic healthcare reforms covering up to 95 per cent of the immense population, “serve as a model for universal health coverage, a bulwark against emergencies, and a reminder that transformations can be far-reaching” (ibid.). China’s medical support in African countries has “become a flagship of China’s contribution to global health” (ibid.). Later that summer, during the Ebola Crisis China strengthened its collaborative efforts with the WHO by supporting the response in the Democratic Republic of Congo (DRC) and dispatched “national health authorities to the WHO response effort”.⁹ As Kreuder-Sonnen and Hanrieder (2015) examined the Ebola crisis shaped the fragmented WHO from within and emphasised China’s role in it. With their divergent practises and politics in conducting health diplomacy, emerging powers, like the PRC, constitute an alternative to global health Governance (Huang, 2018). Drawing from this, global health as a topic has become a major sector in the race of international competition.

⁷ For more detailed information on China’s innovation-driven agenda see also for example the subsections Chapter 4 on “Strengthen national strategic scientific and technological strength” (*qianghua guojia zhanlue keji lilian*) of the 14th Five-Year Plan (2021-2025), published by the Chinese Government, 13.03.2021, at http://www.gov.cn/xinwen/2021-03/13/content_5592681.htm [Accessed 22.11.2021].

⁸ See the WHO web-entry, 18.07.2018, on „Building from Strength: Expanding the Strategic Partnership between WHO and China“ at <http://www.wpro.who.int/china/mediacentre/releases/2018/building-from-strength/en/> [Accessed 22.11.2018].

⁹ See the WHO web-entry on “WHO and China Sign New Agreement on Ebola Response”, 31.08.2018, at <http://www.wpro.who.int/china/mediacentre/releases/2018/WHO-and-China-Sign-New-Agreement-on-Ebola-Response/en/> [Accessed 22.11.2018].

Innovation-prone health system at the intersection of digitalization and healthcare

In the aftermath of the previous SARS crisis, China's government initiated several health reforms. The healthcare system of the post-Mao era was put to test. In case of SARS, the Chinese reporting system with a parallel military structure had provoked strong criticism. Investigations by WHO inspectors on the ground had revealed that the surveillance network set up to track suspected cases was not functioning. The WHO inspectors had also assumed that China had probably hardly invested in public health in the past 30 years and expressed concern about the financially weak sections of the population.¹⁰ Once being praised internationally for the advanced public health services, the economic constraints led to an ailing system, which failed the poor mostly in remote areas and risked dragging middle-income households into poverty (Müller, 2017; see also Lin / Zhao, 2015). As Müller states, the New Rural Co-operative Medical System (NRCMS) was introduced as a counter measure, which also provided a broad reform including the public health insurance in China today. In October 2016, President Xi presented the blueprint for further development of public health and launched the "Healthy China 2030" (*Jiankang Zhongguo*) action plan. According to the WHO web-entry on that agenda themed "Healthy China 2030 (from vision to action)", multisectoral cooperation and innovation would play a key role in this agenda.¹¹

Institutional reforms have also been carried out in the health sector. From a political perspective, that was an upgrade to public health and healthcare institutions. In 2018, three health authorities were merged and the *Guojia weisheng jiankang weiyuanhui* was established as a National Health Commission. The following development of legal framework for smart healthcare can be viewed as a result of the strategy by the government to apply innovation technologies for addressing social problems. The amalgamation of the formerly three responsible administrative authorities to form a higher-level national authority for medical products has underpinned the institutional upgrade and has promised increased efficiency. In September 2018, the health commission announced measures for the recognition of treatment by telemedicine. This policy supported both, the upcoming healthcare service platforms and the so-called 'Internet hospitals' (*hulian wang yiyuan*). The National Healthcare Security Administration (*Guojia yiliao baozhang ju*, NHSA), which was also reformed in 2018, developed guidelines for a combined digital payment model through which online purchases and digital health services are processed via the state health insurance. For the first time, the amended legal regulation allowed the sale and dispensing of drugs,

¹⁰ See the WHO web-entry (2003) on "Case Definitions for Surveillance of Severe Acute Respiratory Syndrome (SARS)." *World Health Organization - Health Promotion* at <https://www.who.int/csr/sars/casedefinition/en/>, [Accessed 02.06.2021].

¹¹ See the WHO web-entry (2016) at <https://www.who.int/healthpromotion/conferences/9gchp/healthy-china/en/> [Accessed 13.05.2021].

including drugs available only on prescription. In the health sector, too, institutional and legal foundations were set before the outbreak of the coronavirus.

As for the intersection of digitalization and healthcare, the applications based on AI will accompany humanity into the future: Apps and Big Data-driven software tools will intervene in future's mobility and in the private sphere alike. AI-based technologies thus not only affect spaces, in which it is designed to improve human interaction, for example, it will reduce travel time or the likelihood of traffic accidents, but also, it will affect, i.e. by the establishment of an "all-seeing digital system of social control" (Andersen, 2020) alter the very living. While the traffic improvements might be widely seen as a merit, those AI-based technologies that will invade areas of the most sensitive intimacy might not be seen as such uncontested merits after all. Regarding medical applications in particular, it is no longer just about the interaction between humans and machines, but also about their entanglement (See Becker, 2020). In doing so, the question of who owns the data and the right to access and use will become a future area of conflict.

In addition, advances in facial recognition software are not only desired for security, but also elementary for the improvement of decentralized health treatment. Intelligent robots or healthcare services applications will also rely on facial recognition to support the diagnosis of diseases; in range from more common diseases, such as diabetes, to rare genetic diseases.¹² Therefore it is not a surprise at all, that Xi has found willing commercial partners in China's most prominent AI start-ups (Andersen 2020). Several of them are strong partners in the development of medical software and equipment, such as iFlytek, Yitu Technology or CuraCloud.

In sum, the reforms and political agendas over the last decades created a favourable framework for pursuing China's innovative pathway. In addition to China's chosen path of innovation-technological problem solving the introduced reforms in the health sector, also favoured crisis management. In the attempt to establish itself as a science and technology superpower, China's government focused more on upcoming technologies. At the latest, when President Xi came to power, the PRC no longer simply had to catch up with industrial backwardness and align itself primarily with the West, but actively pursued the fast lane. Apart from the clear systemic difference caused by the autocratic one-party rule of the Communist Party, China started from an advanced position that can be characterized by two different streams: on the one hand, China's government has already embarked on a course of massive innovation promotion in the preceding years and has also consolidated this institutionally. On the other hand,

¹² See the web entry by Jeannine Mjoseeth on "Facial recognition software helps diagnose rare genetic disease" (23.03.2017) at <https://www.genome.gov/news/news-release/Facial-recognition-software-helps-diagnose-rare-genetic-disease> [Accessed 29.05.2021].

after further environmental and health scandals, China's government again initiated a comprehensive health reform in 2016, promoting an outgoing health care policy.

Fighting Covid-19 China in Action

The outbreak of the SARS-CoV-2 virus in Wuhan became a social and socio-political stress test: media reports showed alarming announcements of overcrowded hospitals, an entire province was militarily sealed off and quarantined, doors of private homes were barricaded with square timbers. The pandemic became a good example, as James J. Chriss argued for how social problems can rapidly spread and evolve global reach (2020, p.22). The Fear of infection or contagion with the unknown Wuhan pneumonia (*Wuhan feiyan*) –that is, Covid-19 lung disease– spread even more quickly.

The Chinese government launched the largest medical assistance operation in the history of the People's Republic of China. In June 2020, the State Council Information Office published the action plan "*Fighting Covid-19 China in Action*" (State Council Information Office 2020).¹³ The 60+ pages document first presents a chronological history of events with initial successes of the containment strategy and it is divided into four subsections. Due to the location of the outbreak, the medical resources concentrated in Wuhan, (Hubei Province). According to this action plan, between January 24th and March 8th 2020, 346 national medical teams were rallied, including 42,600 medical workers and over 900 public health professionals (ibid. Subsection III, p. 47). While the People's Liberation Army (PLA) contributed with more than 4, 000 medical personnel, the PLA Air Force delivered medical supplies. In addition, China increased the efforts to build emergency hospitals and engaged over 1.8 million sanitation workers for waste disposal and disinfection of public spaces (ibid. Subsection III, p. 54).

Besides the "Centralized and Efficient Command" and "A tight Prevention and Control System Involving All Sectors of Society" one aspect focuses on S&T in particular. But what does the action plan prescribe in terms of China's comprehensive agenda? The very first sentence in the action plan of Chapter Five regarding science and technology seeks to emphasize China's efforts by stating that "Science and technology are the sharp blade that humanity wields in the battle against disease" (ibid. p. 42). Further on it elaborates that China has pushed its 'pioneering role of science and technology' (ibid. p. 42) by directly applying the recent achievements of the innovation sector in order to fight against the viral spread and infectious lung disease. The fact that this action plan is published in English stating this positive notion on China's policy agenda supports the addressed argument of foreign policy authors that China's government is presenting its achievements by highlighting "the effectiveness of its model of domestic governance" (Campbell/Doshi, 2020). Without presenting further evidence, the action

¹³ The following page numbers refer to the pdf file for download provided at <http://fj.china-embassy.org/eng/xw/P020200607430003210125.pdf> [Accessed 18.09.2020].

plan praised the efforts made and states that “China has exploited the pioneering role of science and technology and fully applied the results of scientific and technical innovation in recent years” (State Council Information Office 2020, 42). The action plan also highlights, in addition, that societal resources have been pooled from actors, such as enterprises, universities, and research institutes, to concentrate on five main areas of activity, which are: “clinical treatment, new medicines and vaccines, testing techniques and products, viral etiology and epidemiology, and animal model construction” (Ibid. p. 43). At the time the plan was issued, 83 emergency Research and Development (R&D) programs have been initiated. The following subsection of this article on innovation technology to combat the Corona Crisis below, traces by an explorative analysis to what extent this guiding agenda was implemented.

One subsection addresses the usage of big data and artificial intelligence in regard of the epidemic control. One example for the containment of the coronavirus spread is the application of new technologies, such as health QR codes and digitally registered travel records. In this way, an epidemic map could be created in order to enable the better assessment of the occurrence of the infection. Over the past year, local governments offered solutions based on a traffic light system using QR codes.¹⁴ In doing so, China’s government relied on its previous experiences for societal control, such as the Social Credit System, which is a big-data-fuelled mechanism for monitoring Chinese Citizens’ behaviour (Shi-Kupfer/Ohlberg, 2019, p. 24). Based on these collected data, citizens were treated differently.

Apart from the rapid implementation of a digital infrastructure for tracing and tracking, new technologies were applied in other areas, such as for medical treatment as will be outlined below. While the action plan emphasises that “China has fully utilized big data, artificial intelligence, and other new technologies in research and analysis to forecast the trend of Covid-19 developments” (ibid. subsection III.5, p. 43), however, little is said about the application of new technology in other areas. Yet, the proclamation that “China will adopt a series of important measures to reinforce weak links” (ibid.), including to “strengthen the new strategy of pooling nationwide resources for breakthroughs in core technologies” (ibid.), give reason to explore which ‘core technologies’ came to play in more detail below.

Innovation Technology to Combat the Corona Crisis

As the report on China Internet published in June 2020 by South China Morning Post Research showed, the use of digital usage has increased due to the Covid-19 crisis (SCMP, 2020). The health sector in particular has benefited from platforms such as the Ping An Good Doctor or Tencent Trusted Doctors for online consulting, especially

¹⁴ See the Netzpolitik.org web-entry (04.03.2020) by Dominic Lammer at <https://netzpolitik.org/2020/china-setzt-im-kampf-gegen-das-virus-auf-farbcodes/> [Accessed 15.05.2021].

in Wuhan. The following explores three areas of the intersection of digitization and healthcare, i.e. telemedicine, AI-based image analysis and intelligent robots.

Telemedicine

During the last year, telemedicine infrastructure has been expanded. In China, online platforms based on novel 5G-technology were created in the context of epidemic control to reach epidemiological teams in remote mountainous regions and take part in expert dialogue. Also, telemedicine platforms, such as Ping An Good Doctors or Tencent Trusted Doctors for individual consultation, have been in greater demand by the public. According to an annual report of the platform Ping An Good Doctors, the number of users increased by two and a half times to more than 500 million compared to the previous year. An annual average increase of 8.5 per cent was recorded. In total, the company employed more than 1,800 people to provide healthcare services, such as online consultations, referrals and prescription medicines via the AI-based healthcare system. In addition, a regional Internet hospital platform was set up in Fuzhou by the end of 2019 that became operational in mid-July 2020. Drawing from this, the company hopes to connect even more local online insurance platforms in order to accelerate the broad establishment of Internet hospitals.¹⁵

Telemedicine applications have also been integrated into clinical care. The brief report from August 2020, "How telemedicine integrated into China's anti-COVID-19 strategies: case from National Referral Center" evaluated the use of the telemedicine mobile device app Huayitong at West China Hospital of Sichuan University. Patients were registered with the app at the time of admission and agreed to release their personal data. Registered users were able to access free online consultation through this app. In addition, the app supported the identification of disease states (method for triaging) to ensure targeted care and save resources. First, potentially infected individuals filled out a questionnaire with demographic information, temperature, and epidemiological history and symptoms. Then, a video assistant was used by the hospital's medical staff to provide an assessment within a day to figure the health status, focusing on critical symptoms. The potentially infected could be assessed remotely and be separated from the potentially sick: Targeted viral testing (nucleic acid detection) was then performed on the conspicuous individuals, and all others were sent to quarantine at home (Li et al. 2020, p. 2). The seven-member team of authors emphasized the important role of patient data for the effectiveness of the intervention and pointed out the need to also promote such platforms through the media in order to reach all age groups (ibid. p. 3). In conclusion, the study recommends the use of telemedicine in particular for countries with low and middle income in order to ensure better health care.

¹⁵ See the web-entry at <https://www.prnewswire.com/news-releases/ping-an-healthcare-and-technology-company-limited-reports-revenue-of-rmb-2-747-billion-for-h1-2020--301115866.html> [Accessed 12.06.2021].

AI-aided Image analysis

Another field of application of innovation technology crisis management concerns diagnosis and treatment. AI-supported analysis methods require large amounts of data, which were initially not available. In order for machine evaluation to be trained at all, mostly via Deep Learning, Chinese science teams added old computer tomography images of former SARS patients to make up for the missing data sets. On this basis, rapid advances were made in diagnostics and early detection. As early as February 2020, the Alibaba Group's research and innovation institute DAMO launched an AI-enabled system for fast-track diagnosis with an overwhelming accuracy of 96 per cent.¹⁶

The scientific review titled on "A Survey on Artificial Intelligence in Chest Imaging of COVID-19" (Chen et al., 2020) published in November 2020 in the online journal *BioIntegration* lists studies that performed AI-assisted image analysis procedures of chest radiographs in Covid-19 patients. In total, they reviewed 15 studies worldwide on image analysis of radiographs (CXR) and 12 studies on computed tomography image analysis procedures. They concluded with the recommendation to establish a database in order to identify certain types of lesions more precisely (ibid). Another team of Chinese researchers with a background in information technology developed an early diagnostic procedure (Wu et al., 2021). A new large-scale dataset with patient-level and pixel-level annotations was created and the authors introduced a Joint Classification and Segmentation (JCS) diagnostic procedure to provide explainable diagnosis results for medical staff. A joint paper from researchers of the Academy of Medical Engineering and Translational Medicine and the Tianjin Key Laboratory of Brain Science and Neural Engineering both based at the Tianjin University published a paper on AI-aided Disease Prediction focus on the merit of visualized medicine and its benefits for treatment (Liu et al., 2020).

Intelligent Robots

Intelligent robots are another example of the use of smart innovation technology. The *zhineng jiqiren* have a wide range of applications: they are used as disinfection robots or to support diagnosis and treatment. Even before the outbreak of the corona virus, they have become an integral part of the modernisation of intelligent hospitals.¹⁷ According to media reports, the main area of application for intelligent robots is space and surface disinfection of contaminated treatment rooms, such as the Saite Intelligence's the Saiterobot. This Chinese produced intelligent robot is an intelligent medical disinfection device that can navigate autonomously in the room, perform

¹⁶ See GMCC coverage at <https://gmcc.alibabadoctor.com/alibaba-actions> [Accessed 18.05.2021].

¹⁷ See the MedSci web-entry (20.06.2020) at https://www.medsci.cn/article/show_article.do?id=b8b6196188ef [Accessed 25.04.2021].

multi-mode disinfections and is used for user-friendly interaction between man and machine.¹⁸ As the producers webpage declares, the device was originally developed by Saito Intelligence in January 2020 to contribute to the governmental fight against Covid-19. Therefore, they also called it the disinfection and epidemic prevention robot or *gaoxiao xiaodu fangyi jiqiren*) when presented at the China Medical Equipment Fair (CMEF).¹⁹ Especially, the possibility for patient's interaction in remote treatment provided benefits in dealing with an infectious corona virus.²⁰

While dealing with a respiratory-infecting virus, remote consultations, in particular, have advantages. Intelligent robots can carry out contactless interactions between doctors and patients via medically used robots. One of the most prominent non-human team members is the model Ruijin Xiaobai. Its colleagues said that he works 12 hours a day without closing an eye and he doesn't have to wear protective clothing, in addition, he doesn't have to fear infection with the new coronavirus".²¹ The intelligent robot was developed in cooperation of the Shanghai Ruijin Hospital and the Shanghai Jiaotong University School of Medicine (Shanghai Jiaotong daxue yixue xueyuan). It is equipped with integrated lidar software, infrared-radar for automatic driving and remote driving technology. The remote interaction can avoid the risk of an infection during contact and reduce the expenditures of resources, since time and material for changing medical suits are minimized. The robot is directly connected via a 5G-network to the hospital. Hence the obtained information can be transmitted more quickly for interdisciplinary medical consultation. By now, Ruijin Xiaobai has become a permanent team member at different hospitals.

Global Agenda for "A Community for Health for All"

The previously introduced action plan "Fighting Covid-19 China in Action" also addresses China's role in global cooperation. Three points are made: China Appreciates Support from the International Community, 2. China conducts active international Exchange and Cooperation, 3. International Solidarity and Cooperation in Fighting the Pandemic (The State Council Information Office 2020). The action plan emphasises President Xi's personal commitment. Accordingly, in over 50 meetings and phone calls he set out China's agenda in detail and offered help in striving to build "a global community of shared future". As stressed on May 18th at the 73rd World Health Assembly, he pointed out that

¹⁸ According to the company's description, the epidemic prevention robot has two modes of disinfection: one uses UV lamps and the other applies atomised hydrogen peroxide. For more details see the company's information at <https://www.saiterobot.com/dongtai/122.html> [12.06.2021].

¹⁹ For more information on the CMEF that takes place twice a year see the fair's website at <https://www.cmf.com.cn/en/Information?cid=13> [12.06.2021].

²⁰ For example see Vivek Kumars article in *Analytical Insight* on "How Technologies like AI, Robots, Drones Help China to Fight against Covid-19?", released on 22.May 2020 at <https://www.analyticsinsight.net/technologies-like-ai-robots-drones-help-china-fight-covid-19/> [11.11.2021].

²¹ See Wenhui.com (23.02.2020) „Yiliao dui mingdan zhi wai de ‚yuan e duiyuan‘ [The Medical Team members outside the staff list]" at <https://www.whb.cn/zhuzhan/yiliao/20200223/327409.html> [13.05.2021].

China will “support the WHO in leading the global response, to provide greater support for Africa, to strengthen global governance in public health, to restore economic and social development, and to strengthen international cooperation” (ibid. Subsection IV.2, p. 58). For example, he stressed to support the global fight by financing the establishment of a “global humanitarian response depot” (ibid.) and that China in cooperation with the United Nations establishes “a cooperation mechanism for Chinese hospitals to pair up with 30 African hospitals” (ibid.). That mechanism shall also support the distribution of Covid-19 vaccine, as it is seen as a “global public product one it is developed and deployed in China” (ibid.).

As a matter of fact, Chinese entanglement overseas increased over the last decades and so did their outreach to the diaspora community. As outlined in the action plan, China’s government has stated its responsibility for citizens overseas and calls for “governments of other countries to take effective measures to ensure the safety of Chinese students, the personnel of Chinese-funded institutions, and other Chinese nationals” (ibid. Subsection III, p. 46). While offering health kits to overseas and dispatching medical expert teams rather counts as conventional support, China declared also to offer telemedicine services platforms in order to “provide scientific and professional guidance on Covid-19 prevention and control for Chinese citizens in other countries” (ibid.). In order to fulfil this agenda, the government partnered up with telemedicine providers, such as the former introduced Ping An Good Doctor or WeDoctors and Tencent Trusted Doctors, and increased their support for overseas Chinese and foreign nationalities by providing multilingual services or joining with foreign partners.²² In synch with the China’s global outreach agenda is getting the innovation-prone approach in health care recognised by international institutions, such as the WONCA certificate for high standards in AI-health technologies.²³ As the Ping An Doctors annual report of 2020 informs, the platform even made first prizes in six global medical imaging contests.²⁴ In sum, it seems that China’s government aims to pursue the presented innovation-based approach globally to reshuffle the future of global health architecture.

²² For example, Ping An Good Doctors partnered with Singapore-based GRAB to enter the Southeast Asian market, see the entry of Health Advances Blog at <https://healthadvancesblog.com/2021/06/30/tencent-backed-wedocor-is-going-public-what-are-the-next-steps-for-chinese-digital-health-companies/> [12.11.2021].

²³ WONCA refers to The World Organization of Family Doctors, which was founded in 1972, totals to 118 Member Organisations, and operates under the WHO, see https://www.who.int/workforcealliance/members_partners/member_list/wonca/en/ [25.05.2021]. See also the company’s announcement at http://www.pagd.net/newsPage/newDetail/1-0-0-0-2-5?lang=EN_US [12.11.2021].

²⁴ See the English summary of the annual report’s page 18 at http://www.pagd.net/media/pdf/us/2020an/2020_AN_US.PDF [24.02.2021]; for the full report in Chinese see https://staticpacific.blob.core.windows.net/press-releases-attachments/1289469/HKEX-EPS_20210317_9661234_0.PDF [15.05.2021].

The CIIS' Strategic considerations

In the spirit of the shared community of common destiny (*Renlei mingyun gongtongti*), a think tank study from the China Institute of International Studies (CIIS)²⁵ titled "How COVID-19 is Changing the World Order" estimates the effects of Covid-19 on international relations and propagates ways, in which the world order should be adapted. The common sense of a think tank study underlines the need for international cooperation (CIIS 2020). A cursory analysis of the texts on their attitude to the potential for China to influence the global health architecture underlines that against the background of the current crisis the position hardened. For example, Qin Yaqing criticises the US 'America First'-Policy and emphasises that "this pandemic is yet another manifestation of a serious failure of global governance" (Qin, 2020, p. 15). For several years now, as the Foreign Affairs authors Campbell and Doshi assumed, is Xi Jinping pushing its foreign policy apparatus to come up with "leading reforms to 'global governance'" (Campbell/Doshi 2020), so does this CIIS report reads as an answer for that request. For example, Yang Jiemian who is Chairman of the Council of Academic Affairs and Senior Research Fellow at the Shanghai institutes for International Studies (SIIS) strongly recommends the "restructuring of international power" (2020, p.20) and in doing so "to ensure sustainable evolution of the world order thereafter" (ibid. p. 23).²⁶ He clearly states his discontent with the current global governance by stating that this "pandemic is another attack on Western ideological hegemony" (ibid. p. 21). Regardless the outcome of the current crisis, systemic change seems inevitable for his Colleague from the China Foreign Affairs University, Qin Yaqing "whether or not a consensus on cooperation and mechanisms for cooperation can be reached as a result of the crisis will not only directly affect the success or failure of the fight against the pandemic, but will also have profound impact on international relations and the world order in the post-pandemic period" (2020, p. 17).

Rather than aiming to strengthen the sovereignty of the fragmented WHO, Chinese scholars promote the complete opposite. Qin also suggests rebuilding of the G20+1 Model in order to establish "a sound and effective global multilateral cooperation mechanism" (ibid. p. 15). He claims that the "era of hegemonic cooperation is over" and thus promotes a "collective leadership" (ibid. p. 16). The main objective of a newly established cooperation mechanism should fulfil the two functions of "political leadership" and "advisory implementation" (ibid). While he foresees the G20 as "the central leadership body", "multilateral (!) organizations", such as the WHO, have the task of collecting important information in order to derive advice and recommendations. They are merely intended to "serving as a solid scientific basis for the G20 to propose global guiding principles" (ibid.).

²⁵ For further information see the Think Tank's website at <http://www.ciis.org.cn>.

²⁶ Yang, Jiemian. 2020. "The COVID-19 Pandemic and Its Impact on Contemporary International Relations." In *How COVID-19 Is Changing the World Order*, edited by CIIS, 18–26. Beijing. http://www.ciis.org.cn/english/2020-05/25/content_41162811.html.

International cooperation beyond Institutions

The innovation-based approach accompanied China's agenda to fight out of the corona crisis. Well known IR scholars, such as Qin and Yang even targeted the restructuring of the world order as a result of the management of corona crisis, but how does innovation-tech transfer into supporting this changing role of China in global health? Beyond international research communities, also joint ventures and transnational operating Foundations, such as the Jack Ma Foundation and the Alibaba Foundation are in the game. In cooperation the two foundations established the Global MediXchange (GMCC, *Quanqiu feiyan shizhan gongxiang pingtai*) to fight against Covid-19 lung disease.²⁷ Supported by Alibaba Cloud Intelligence and Alibaba Health, the GMCC program acquired digital data for analysis. The GMCC was primarily created to enable the international exchange between physicians and medical staff internationally. Hence, the core of the project is an online communication platform that facilitates cross-border collaboration between the scientific community and the medical staff at the front line. For this purpose, GMCC provides a protected communication channel and offers its real-time services in eleven languages. The European research network "The Federation of European Microbiological Societies" (FEMS) based in the Netherlands is a strong supporter of this China-based platform.²⁸ This is a good example for the going-global strategy of China's Party State and further legitimacy by means of both throughput and output. In addition, Alibaba Cloud also offers in conjunction with DAMO Academy and DingTalk several AI-technologies and cloud-based solution to support organisations and companies worldwide.²⁹

By donating medical supplies, the big innovation-tech funded Foundations become a global health player themselves. In April 2020 the Jack Ma Foundation and Alibaba Foundation announced their support for Africa.³⁰ Although, the donated products, such as in ventilators, face shields, gloves and so on, are rather conventional in terms of innovation technology, they will also contribute to China's global reputation.

Concluding outlook

In the context of system rivalry, the connection between innovation and political influence will grow stronger. The progress in the advanced application of telemedicine, AI-based technology and the application of intelligent robots has benefitted China's innovative pathway in fighting Covid-19. During the course of the corona crisis, the PRC

²⁷ For more information see the GMCC website at https://gmcc.alibabadoctor.com/?locale=zh-cn&entry=aliyungmcc_re_20200420__ [Accessed 14.05.2021].

²⁸ For more information on FEMS go to https://fems-microbiology.org/about_fems/organization/ [Accessed 14. 05. 2021].

²⁹ See the GMCC website at <https://gmcc.alibabadoctor.com/alibaba-actions> [Accessed 14.05.2021].

³⁰ See the CGTN report at <https://africa.cgtn.com/2020/04/23/african-nations-to-get-300-ventilators-from-jack-ma-foundation/> [Accessed 12.06.2021].

has propagated its application of Science & Technology as capability and its strength: the constant mutability that drives the path of innovation-driven growth. The enormous economic and technological successes of the past decades lead to China's rise. Yet, the global involvement also revealed during the first SARS outbreak of 2003/2004 the shortcomings of the health sector. The political path that followed applied innovative-prone policies and might have created a favourable starting position for fighting the crisis. To deal with the corona crisis caused by the SARS-Cov-2 outbreak, China quickly turned to innovative solutions, such as the use of mobile device applications for QR code. In particular, advances in medical applications such as intelligent robots or AI-based image analysis techniques have contributed to deal with the scarce resources. In addition, other AI-based technologies were applied in combating the Covid-19 crisis, such as training predictive models to forecast the spread of the virus – local and global. The governmental policy integrated big start-ups in the fight against the novel coronavirus and by doing so boosted the throughput legitimacy.

In addition, the acceptance of diagnostic support through telemedicine platforms in selected hospitals as well as in the broader society have both led to containment and helped relieve the burden on overworked medical staff. However, little is known about the societal effects of the massive data collection, and at this point, the long-term impact might be even impossible to seize. Yet, through the upstream of vast amounts of medical history, a possible outbreak allocation could be spotted in advance. Whether it is the AI-based monitoring and diagnostic applications or the training of intelligent robots, China's approaches to innovation technology in tackling the crisis provide an example with global reach and thus might impact China's role in global health and in the global health Governance. Especially, telemedicine platforms could have a lasting effect by providing services to the growing Chinese diaspora. Tencent Trusted Doctors, for example, is pursuing projects with hospitals in partner countries along the Silk Road. These brief examples alone show how Chinese-initiated international collaborative research, telemedicine platform providers or the innovation technology development, in general, might influence the global health structure beyond the within and beyond the framework of the WHO.

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Edward Wilmot Blyden.

The African Personality and Early Intellectual Work in the Gold Coast (Ghana)

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Abstract

There is a commonly held view that African nationalism took shape out of contacts of African intellectuals with twentieth century Pan-African leaders. Yet, this interpretation lacked concrete evidence, as many of these intellectuals owed their ideological formulation to Nineteenth century teachings of Edward Wilmot Blyden. In his writings, Blyden articulated a thorough understanding of African's strengths and weaknesses. For Blyden, Western civilization intended to make the African a caricature of European society. As a result, the situation of the African became one of chaos as he lived in strict psychological conflicts. A revival of the African personality rested as a solution to the distorted manhood of the African and a path to his future progress. This article examines Blyden's theory of the African personality as revealed in early intellectual work in the Gold Coast (Ghana). Drawing on Blyden's African personality theory, the article revealed that these intellectuals begun a vigorous campaign to oppose Europeanization of the African system of life and took an uncompromising stand against ideas of black "inferiority" and "backwardness".

Keywords: Blyden; the African personality theory; Western civilization; intellectual; the Gold Coast.

Introduction

The belief in African inferiority and the superiority of Europeans remained a tense and often challenging theme in African history. Since the early contact of Europeans with Africans, Africans were depicted as inferior, unable to reason and to crown it all people without history and origins. Europeans, much influenced by the anthropological race theories of the eighteenth and nineteenth centuries, reached Africa pre-occupied with the assumption that people of Africa were in need of Western modernity and civilization. A revolutionary spirit should arise in all parts of Africa to supplant African superstitious practices with much Westernized modes of life. Indeed, Africans were made to feel victim of being part of a system that enforced their inferiority and

subjugation. African arts, history and philosophy were remodeled to be a sort of shame and humiliation. To this point, imitation of Western life and manners became a fashion of every African and a sign of modernity and education.

Fortunately, the situation did not last for long as Edward Wilmot Blyden created a counter discourse to the derogatory and malicious effects of Western influences. Blyden was born on 03 August 1832 in the Island of St. Thomas, the Dutch West Indies. His father was a tailor while his mother was a teacher. Upon his apprenticeship in school, he showed an accomplished level in all subjects. This was why his teacher the Reverend John Knox advised Blyden to go to America as to continue higher education. In 1851, Blyden went to America with a much vigor to find a place where he could develop his intellectual and physical reflections. Yet, he was rejected in two colleges in the U.S. because of his race. Later in the same year, he met two friends Walter Lowrie, secretary of the Presbyterian Board of Foreign Missions, and John B. Pinny of the New York Colonization Society. They asked Blyden to repatriate to Liberia as a next destination to pursue higher education. Upon his arrival at Liberia, he attended Alexander High school and was able to attain many positions early in his life. As a teacher, editor, politician, educator and theologian, Blyden formed a distinctive philosophy regarding the African problem and ways of its remedy. His account of the African personality theory was a one dimension of this brilliant work to elevate the African race.

Blyden saw in the African personality theory an asset to restore the distorted manhood of Africans. He preached among Africans the need to see in their African personality an avenue to their development and progress. He further advanced that an understanding of the African personality would make Africans one-step closer to the restoration of their identity and a re-evaluation of their place among races of the world. Indeed, Blyden's appeals attracted many emerging African intellectuals in general and Gold Coast intellectuals in particular. In the Gold Coast, the focus of this study, intellectuals engaged in systematic resistance to Western influences. Their actions and intellectual production became a source of great nationalistic uprising which set the revival of the African personality a foremost priority to all Africans. As such, the writing of this article emerged as a need to examine Blyden's concept of the African personality and in particular the impact it had on West African intellectuals which is scarcely recognized in existing literature.

The African Personality Theory in Edward Wilmot Blyden's Philosophy

Africa and Africans had long been the target of immense false depictions. These depictions dated back almost to the eighteenth century when life in Europe flourished because of the industrial revolution coupled with an apparent subordination and underdevelopment of Africans because of the slave trade. In the meantime, there

emerged a tendency to subdue African systems and glorify Western systems. This mindset owed its existence to the works of the Anthropological Society of London, which was determined to draw a race ladder where Europeans came at the top of the race ladder while Africans occupied the lowest status. All these changes enforced the idea of black inferiority and placed, as it was known "a burden" on Europeans to civilize Africans and change much of their systems to be Western in outlook. Alas for Africans, European presence did nothing but made the African live in two worlds, the African and the European, as to attain high social status and secure white color job in the emerging colonial systems and to crown it all lost touch with their origins.

Blyden's principles of the African personality came out as a response to the malign experience of Africans with the westernization process. Blyden (as cited in Lynch,1967) rejected the idea of innate superiority, or inferiority of races and stipulated that "each race was equal but distinct"(p.60). Distinctiveness of any race was because of differences of destiny and endowment. As such, the peculiarity of the African system of life was because of a differing socio-cultural environment and not an inferiority complex. For Blyden (as cited in Shapley,2003), this naturally peculiar nature of the African was a God given and there was no need to temper with a system that was God given:

...these racial peculiarities are God given. For his own glory they are and were created. The neglect of them, suppress them, or get rid of them is to get rid of the cord which binds us to the Creator. Try and learn the important lesson that it is God's intention for you that you should be different from all the rest of mankind (p.78)

European intentional suppression and neglect of these peculiarities was antithetical to the teachings of God and could bring nothing but a distortion to the divinity of these systems. Furthermore, Blyden (as cited in Lynch,1967) advanced that the westernization process of African systems would deviate the African from approaching the real essence of the African personality and enforce the moral and mental peculiarities of these systems out of their real rational and normal actions.

In a stronger tone, Blyden appealed on all Africans to preserve the distinctiveness of the African personality. For Blyden (as cited in Shapley, 2003), the African should resist the tide of Western influences and understand that there would be no real physical and intellectual emancipation without restoring ties with the African personality. It was the "worst suicides" to give up the African personality:

Be yourselves.... If you are not yourself, if you surrender your personality, you have nothing left to give the world. You have no pleasure, no use, nothing which will attract and charm men, for by the suppression of your individuality, you lose your distinctive character.... You will see, then, that to give up our personality, would be to give up the peculiar work and glory to which we are called. It would really be to give up the divine idea— to give up God—to sacrifice the divine individuality; and this is the worst of suicides (p.61)

As a counter process, the African personality would make the African in touch with his origins. He no doubt would find along traditional life of ancestors a very dynamic system of worshiping and socialization. The African personality would further Africans self-pride and esteem as he was in touch with systems known and very close to his natural development and evolution. It would further restore African pure divinity, which have been destroyed by European Christianity and the presence of Western agencies that worked to the good of Europeans and the detriment of Africans.

Blyden's systematization of the African personality brought about a comparison between the African personality and the European personality. In an attempt to elucidate the mystifying effect of Western influences, Blyden (Lynch, 1967) stated that the African personality was spiritually in advance of the European personality. Its communalistic, spiritual, cooperative and sympathetic nature placed it in parallel or in advance of the European personality. For Blyden, the distinctiveness of the African personality made the Negro "on a different plane", religiously superior and morally different from his European counterpart. Blyden further exemplified by many instances where the African individual placed communal interests over individual interests. As part of his childhood education, the member of the community learned that his destiny was inseparable of the whole community. According to Blyden (1908), for the African "we, and not I, is the law of African life" (p.30). Conversely, the European personality (Lynch, 1967) exhibited traits of harshness, individualism, competitiveness and combativeness. These traits made the European personality materialistic in nature as it sought individual's achievements over spirituality. Blyden (1888) wrote:

It would seem that the tendency of the West Aryan genius is ever to divorce God from His works, and to lay great stress upon human capabilities and achievement. Man is an end, not a means. The highest man is the highest end to which all things else must bow. The aggregate must bend to the individual if he is superior to other individuals in intellectual or pecuniary might. The more favored race must dominate and control the less favoured race. Religion is to be cherished as a means of subserving temporal and material purposes...there is now no more direct communication with or inspiration from God necessary or possible (p.278)

Because of its materialistic aggrandizement, the European personality searched for the material over the immaterial-the soul- and tried to subordinate individual's sacredness in the presence of technological advancements and progress. This mindset, Blyden continued, was behind Europeans racial hierarchy of races and the failure of philanthropic movements in diffusing real progress among Africans.

Blyden's theorization of the African personality did not only evince through mere racial prognostications, but also revealed through its impact on the political, educational and social needs of Africans. Blyden hinted to the fact that mere understanding of the merits of the African personality could do nothing to Africans until theses principles

were modeled to bring advancement in all Africans walks of life. In Blyden's view, a concrete and real realization of the African personality could materialize through pure African institutions. These institutions be they educational or religious could be as a medium to accelerate African opportunities for a positive change and reveal the real essence of African manhood. Indeed, the burden was too heavy for Africans, as many of them could not resist Western influences and at the same time feel still attached to their old systems.

Blyden's conceptualization of the African personality theory coincided with a time of immense challenges for the African people. African intellectuals in general and intellectuals in the Gold Coast (now Ghana) in particular, either through direct contact with Blyden or through his publications, found in Blyden's principles of the African personality a force to advance their educational, social and cultural needs. Indeed, the period after the scramble of Africa in the Gold Coast, the focus of this study, was a period of remarkable resilience against the Westernization process of African's system of life and an opportunity to shape an African personality similar to that cherished by Edward Wilmot Blyden.

Blyden, the African Personality and Early Nationalism in West Africa

Since the fifteenth century, West Africa had been at the hub of European commercial and philanthropic influence. This influence accelerated in the seventeenth century because of the slave trade and later in the nineteenth century as European presence changed from mere commercial relations into formal colonialism. The latter brought about more government scrutiny over natives especially their education and religion. For the government, Western education and missionary activity were vital in making the native an easy prey to the ruler. Both shared the view that a complete indoctrination of the natives rested on imparting the ruler's culture and modes of life. Through systematic spread of government and missionary schools, the natives were exposed to Western culture, history and philosophy while African culture and lifeways were neglected or excluded from the curriculum. Alas for Africans, their personality was lost in the pursuit of an alien psychology while their image of themselves was of detest to all things pertaining to African life. Within this time of great upheaval for people of West Africa, a great deal of anger was aroused by many intellectuals who felt the danger of being absorbed by Western culture. Indeed, the late nineteenth and early twentieth centuries were times of great resilience to the tide of Western influences and a remarkable phase in renovating the African personality.

In Nigeria, Blyden's African personality theory had gained the attention of many intellectuals. Mbonu Ojike refuted European's claims of the primitiveness of African culture and obviated that no one can consider African systems as a "passing culture". For Ojike (as cited in Glora, 2014), these systems are "too stable to be unproductive, too

dynamic to be static, too dignified to be unimpressive, too African to be Western.” (p.92). In Liberia, John Payne Jackson alluded to the mystifying nature of European influence. Like Blyden, he affirmed that any attempt to develop the African on European lines could only worsen the situation. The African must find the lines of his evolution as the only path for progress. Johnson further attacked the attempt of Europeans to associate African systems with inferiority. He (as cited in George,1895) wrote:

In the work of elevating Africans, foreign teachers have always proceeded with their work on the assumption that the Negro or African is in every one of its normal susceptibilities an inferior race, and that it is needful in everything to give a foreign model to copy; no account has been made of our peculiarities, our languages enriched by the traditions of centuries, our- parables many of them the quintessence of family and national histories (p.48)

Identical to Blyden’s view, peculiarities of the Negro were neglected in the pursuit of a foreign model. These feelings of detest to European influence and admiration of African worldview led many to change their European names into African names. Both Edward Macaulay and Jacob H. Samuel of Nigeria became Kitoyi Ajasa and Adeg boyega Edun respectively. There emerged a tendency to use the Yoruba instead of the English language. This further led to increased publications of African history written in Yoruba. The press was further another medium where the intellectuals refuted ideas about black inferiority and praised many notable African personalities and their contribution to the African race and humanity at large.

In Sierra Leone, resistance to European influences and an appraisal of the African personality was the fashion of the time. The Sierra Leonean intellectual felt fed up with the systematic erosion of African lifestyle and the imposition of Western models. James Africanus Beale Horton was at odds with the anthropological race theories that denigrated the African race and idealized the European race. For Horton (as cited in Meberbeche,2010), “there exist no radical distinctions between him and his more civilized confrère”. Similar to Blyden, Horton believed that people of the African race are intelligent, productive and in advance of the people of Europe. He called on propagators of race distinctions to read history so that they could unveil reality and see the uncontaminated picture of the Negro unspoiled by European influence. Indeed, the work of these intellectuals stipulated a positive start for fellow Africans to reconsider how they view their mission in life. In the Gold Coast, the focus of this study, the intellectuals were avid followers to Blyden’s view. Many of them disdained the apparent subordination of African systems and called to make comparisons between the African personality and the European personality as a means to make people proud of their own history, culture, literature and philosophy.

The African Personality in Early Intellectual Work in the Gold Coast

During the first half of the nineteenth century, the Gold Coast intellectual showed great zeal to integrate into the colonial machinery. This was because ideas of Black inferiority were not very much common as many of them obtained Western education and white color jobs. In this regard, Kimble (1963) observed that Africans integration into the colonial service “depended on their ability and willingness to serve, and it would appear that the question of color had scarcely been relevant”. Yet, this vision did not last for long as race relations hardened due to the belief in the incapacity of Africans to hold important positions. Indeed, the period witnesses an apparent hostility from the British colonial government to Gold Coasters, coupled with systematic policies to impose British culture at the expense of people’s culture and way of life. The response of the intellectuals formed the nucleolus of a culture of protest against (1) ideas about black inferiority, (2) a fight against the strong tendency to imitation, (3) and a revival of the African past.

The Intellectual between the Myth of Black Inferiority and the Merits of the African Personality

As white abuses in the Churches and the colonial service intensified, questions of color became central to the Gold Coast intellectual. Feelings of racial inferiority as part of a race conscious stipulated by Blyden through his contacts with West African intellectuals and the Gold Coast intellectual in particular and the day-to-day experience of the intellectual necessitated an immediate response to de-construct the myth of the superiority of the West and give life to the dead African personality. The intellectuals provided comparisons between the African personality and the European personality. Attoh Ahuma (1911) noted that it was a mistake to associate the African personality with bad things. He, in reverse, advanced that “the Whiteman has his vices as well as his virtues, and sometimes the vices of his virtues” (p.40). In the same manner, Aggrey had heaped praise on the intellectual and physical contribution of the African personality. While the European personality appeared to favor the material over the spiritual, the African personality was spiritual and more tied to human nature. In a vivid description of the merits of the African personality, Aggrey (as cited in Edwin, 1929) mentioned that “Some people took to war; we took to love; some people took to hate; we took to song; some people took to anger; we took to laughter; some people took to despair; we took to hope”. Similar to Ahuma and Aggrey, J. E. Casely Hayford levelled severe criticism at the European personality and opined that throughout history the African personality was full of positive traits and good habits. In his masterpiece, *Ethiopia Unbound* (1911), he provided a description of the two personalities. Kwamankra, African, and Whitely, a European theology student, exemplified a staunch attack on the materialistic nature of Europe and the spiritual

nature of Africans. Throughout the whole narrative, the reader notes how whitely, though a theology student, was empty, believing the superiority of any individual as part of his material achievement. In contrast, Kwamankra exposes the reader to a deep intellectual, spiritual and philosophical personality. The reader becomes attached to how Kwamankra sees life and how he interprets the world around him. In all these, Hayford plainly succeed in delivering the faults in the European personality and the hidden and unseen attributes of the African personality. Indeed, these descriptions fuelled the minds of intellectuals for the need to fight imitation and escape European physical and intellectual incarceration.

Fashioning an African Personality and Combatting Imitation

For the Gold Coast intellectual, Imitation would never create a liberated, modernized and civilized African but rather a personality without roots and essence and mostly parasite upon the European. Consequently, concerted actions were deployed to provide an Afro-centric interpretation of the African world as to counteract Eurocentric interpretations. Kobina Sekyi attacked the unreasonable imitation of European modes of life especially by the Western educated elite. According to Sekyi (as cited in Langley, 1970), "whatever is borrowed is superficial and only taints our culture and chains the nation to the whims of external powers". Sekyi exposed his readers and theatre audience to the most influential play of the time, "The Blinkard" (1915). The play attacked the blind mimic of European lifestyle. For Sekyi, the time when the African despised his own culture, he only deepened his own misery and became psychological unstable as he could neither live with the new Western culture nor forget about African worldview. John Mensah Sarbah (1906) shared Sekyi's opinion and advanced that the African could not develop with things alien to his environment. Instead, progress was the "natural outcome of its own history" (p.121). Identical to Blyden's view, Casely Hayford (1911), disdained imitation and condemned African's rush for the adoption of European lifeways. In "Ethiopia Unbound", Hayford used the character of Tom Palmer as a vivid example of Africans who lost their identity in the pursuit of European personality. The reader experienced the cultural abortion of Palmer as he blindly dressed, behaved and thought like a European. By the end, Tom Palmer realized the bad effects of imitation of Western modes of life. Hayford further provided the example of many African women who became contaminated by the ruthless imitation of everything European. Ekuba, one of the characters, refused to be one of the wives of the king as part of her great attachment to Western ideas. For Hayford, this signified a staunch attack on monogamy which represented one aspect of the African system of life that had been greatly damaged along European presence.

Resistance to imitation became the cry of the time. In 1889, Sarbah founded the "Mfantasi Amanbuhu Fékuw" in Cape Coast. The new body worked a scheme to make

Africans know about their institutions. As part of the objectives of the body, Sarbah sought to make Africans proud of themselves. He (as cited in Kimble, 1963) saw no reason why Africans ignored their own origins and propounded that the Japanese kept attached to their “national costume and yet excel in wisdom and knowledge” (p.515). Indeed, the appeals boosted the reputation of the body and encouraged people to discard their European names and adopt African names. One editor (as cited in Kimble, 1963) in the Gold Coast People noted in 1893:

“To All Whom It May Concern!! Two gentlemen of intelligence having pluckily dropped their foreign names, have encouraged me to do the same...I am no slave, so no body must call me Ebenezer Weldu Cole Eshun any more. My real name is Esuon Weldu” (p.518)

Along this highly positive revolutionary spirit to revive the African personality, the Gold Coast intellectual thought further of strengthening roots of the African personality through reviving the African past. Many of them sought the African past as an authentic medium to diffuse the real essence of the African personality.

The African Past as a Source of the African Personality

Many intellectuals tried to counteract the idea that African history started with the arrival of Europeans. For them, there was a need to correct these misconceptions as part of a good understanding of the African personality. For example, Attah Ahuma published “The Gold Coast Nation and National Consciousness”. The book’s themes centred on giving an account of African history with an emphasis on the contribution of these personalities to human history. In this regard, Ahuma (1911) wrote “In prehistoric days, Europe looked to Africa for new ideas, for fresh inspirations, and the saying was perpetuated and handed down from generation to generation, *Semper aliquid novi ex Africa*-There is always something new from Africa”. Identical to Ahuma, Casely Hayford (1911) reminded his fellow Africans that they had a rich past where people of the African race were perceptive, knowledgeable and intelligent:

“It had even been granted that for intellectual endowments he had nothing to be ashamed of in an open competition with the Aryan or any other type.... Here was a being anatomically perfect, adaptive and adaptable to any and every sphere of the struggle for life. Sociologically, he had succeeded in recording upon the pages of contemporary history a conception of family life unknown to Western ideas”(p.1-3)

As an editor, Hayford wrote many article about some notable African personalities. These included Hendrick Vroom and George Ferguson, to mention just few. In 1906, Ahuma published “Memoirs of West African Celebrities”. As part of reviving the African past, Ahuma noted that Africans are in need of “Intelligent Retrogression” as a means to know about the African past and a path for future progress. Moreover, many

intellectuals rallied together and formed the Aborigines Rights Protection Society in 1897. The main objective of the body (as cited in Padmore, 1936) was "To foster in the rising generation a knowledge of their historical past". The body further established a newspaper in 1898. The newspaper published a series of articles under the names "Sketches of the Lives and Labours of our Great Men". The articles focused on the intellectual, religious and philosophical contributions of the African personality to Africa and the Western world.

Conclusion

The article examined Blyden's theory of the African personality as revealed in early intellectual work in the Gold Coast (Ghana). The article exposed Blyden's conception of the African personality. It revealed that Blyden's preoccupation was to dismiss the idea of black inferiority and instill positive ideas about Africa and the African race. Blyden attempted to create a collective psyche among fellow Africans to overcome European stereotypes and carve new paths of development and progress. The article further revealed that Blyden's theory of the African personality had much impact on early intellectual work in West Africa in general and in the Gold Coast in particular. The African personality became the bone of their resistance and a force to re-shape Africa of their own uncontaminated by Western life and civilization. Drawing on Blyden's theory, these intellectuals resisted the strong tendency to imitation and called on behalf of all Gold Coasters and by extension Africans, that European system of life could never suit Africans because each race had its own peculiarities. The erosion or the intentional suppression of these systems would only enforce African's subjugation and servility. Like Blyden, the intellectuals attempted to create in peoples' minds a confidence in their capacities and advanced that the African personality gave to the world aspects of its rich history, art and civilization. Indeed, Blyden's principles remained vital in shaping new beginning for these intellectuals that forged new paths to independence. Therefore, it is essential to encourage further investigations on Blyden's principles as their impact could not be limited to colonial Gold Coast, but rather to much modern Ghana.

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Burning up and burning out.

Human Sustainability in a Time of Emotional Climate Change

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Abstract

The world is focused on countering climate change to guarantee our survival. But as our planet burns up, we are burning out. The costs of mental health disorders dwarf those of climate change and yet do not get commensurate attention from global leaders. Health care providers and organizations have acted first but need support of the financial markets and public decision-makers. In this paper, we argue that the economic and social toll of mental health and wellbeing issues deserve equal attention from business and public leaders because Human Sustainability is as important as Environmental Sustainability for our ability to endure and thrive as a species in harmony with others.

Keywords: emotional climate; mental health; compassionate management; corporate responsibility; personal responsibility; health policy; normative accounting; inflection points.

Introduction

Much as our climate has changed, so has the reported level of employee wellbeing. As our planet seems to be burning up, we are burning out. To promote human sustainability, public and private players must focus on and attempt to quantify the “human pollution” imposed by companies on their employees and, by extension, their families and communities.¹

¹ For our purposes, “human pollution” is the emanation of harmful emotions and behaviors (e.g., pressure, humiliation, poor management) by individuals into their environment - in this case, workers in the workplace. “Emotional climate” indicates the emotional state and relationships among the community members and hence quantifies the quality of the environment within a particular context – in this paper, the workplace. “Human capital footprint” (or “emotional footprint”) alludes to the psychological contribution and impact of organizations on their employees, as well as individuals on others.

This paper aims to describe contributing factors to worsening reported employee mental health² and wellbeing in the workplace and provide guidance, tools, and concrete frameworks to manage and measure human capital sustainability. Our goal is to help organizations consider how they would account for their “human capital footprint” – as more and more are for their environmental footprint – and how investors and the financial markets would evaluate their performance and reward best performers.

Mental health has been an issue for many decades. Depression and anxiety cost the global economy about \$1 trillion a year in lost productivity, according to the World Health Organization. In the U.S., a study estimated major depressive disorder costs to reach \$210 billion, about half of it attributable to absenteeism and presenteeism (present at work but not fully performing).³ Over the past five years, U.S. employers’ behavioral health expenses rose more than 10% annually, compared to 5% for other medical costs.⁴

In contrast, the cost of climate change reached \$210 billion in 2020⁵, or the \$95 billion in damages⁶ caused by climate change disasters (e.g., tropical storms, severe storms, wildfires) in the U.S. in 2020 –more than double the 41-year average of \$45.7 billion.

Yet mental health remains a minor topic in Environmental, Social, and Governance (ESG). Environmental impact prevails as the critical focus of ESG negotiations and actions among global private and public leaders. Even if the latest U.N. Climate Change Conference (COP) event might have disappointed, progress has been made since the first World Climate Conference in 1979; countries and corporations made strides and promises towards a net-zero emissions future with ambitious new commitments.

The economic and social toll of mental health and wellbeing issues deserve equal attention from business and public leaders. It is time to consider Human Sustainability

² According to the World Health Organization, “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” In this context, “mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.” The definition implies that mental health is more than just the absence of mental disorders or disabilities. Mental health is an integral and essential component of health. World Health Organization, “Mental health in the workplace,” <https://www.who.int/teams/mental-health-and-substance-use/promotion-prevention/mental-health-in-the-workplace>, accessed November 2021.

³ Paul E. Greenberg, MS, MA; Andree-Anne Fournier, MA; Tammy Sisitsky, MA; Crystal T. Pike, MBA; and Ronald C. Kessler, PhD, “The Economic Burden of Adults With Major Depressive Disorder in the United States,” *J Clin Psychiatry* 2015;76(2):155-162, <https://doi.org/10.4088/JCP.14m09298>, accessed November 2021.

⁴ Angela La Vito, “Anxiety is expensive: Employee mental health costs rise twice as fast as all other medical expenses”, *CNBC Health and Sciences*, September 28, 2018, <https://www.cnbc.com/2018/09/26/employers-are-starting-to-think-about-healthy-differently.html>, accessed November 2021.

⁵ Muiche Re, Record hurricane season and major wildfires – The natural disaster figures for 2020”, January 7, 2021, accessed November 2021, <https://www.munichre.com/en/company/media-relations/media-information-and-corporate-news/media-information/2021/2020-natural-disasters-balance.html>, accessed November 2021.

⁶ Adam B. Smith, “2020 U.S. billion-dollar weather and climate disasters in historical context,” *Climate Gov*, January 2018, <https://www.climate.gov/disasters2020>, accessed November 2021.

as important as Environmental Sustainability for our ability to endure and thrive as a species in harmony with others.

Prior efforts at promoting wellbeing at work have not been sufficient

Occupational social work emerged in the late 1800s with U.S. companies such as H.J. Heinz, which started to hire and deploy “social welfare secretaries” to assist workers with personal issues such as insurance, loans, and housing. By the 20th century, Macy’s Department of Social Services provided monetary support and address employees’ psychiatric wellbeing.⁷

In the 1940s, companies launched occupational programs to manage productivity losses and poor work quality due to alcoholism⁸. Voluntary and confidential employee assistance programs (EAPs), were created soon after to help employees and managers deal with personal challenges impacting job performance, health, and wellbeing in order to optimize an organization’s success.”⁹

In the 1950s, after U.S. EAPs started to include resources for mental health in the 1950s, the Hughes Act required all U.S. federal agencies to offer EAPs by the 1970s.¹⁰ By the late 1980s, many EAP services, including counseling, were extended to employee families.¹¹ Private EAP companies began to serve private sector organizations and their employees.¹²

However, in 2015, only 3% of eligible employees took advantage these offerings,¹³ provided by nearly 80% of U.S. employers,¹⁴ including most *Fortune* 500 companies.¹⁵ EAPs had a positive employees’ mental wellbeing: employee absences related to mental or emotional wellbeing decreased by an average of 6.8 hours when employees engaged an EAP; for employees who had been missing significant time (20 hours of work or more), the average decrease was 34.4 hours.¹⁶ Depression symptoms became

⁷ *Compassionate Management of Mental Health in the Modern Workplace*, Carin-Isabel Knoop and John A. Quelch, Springer 2018, p. 24.

⁸ United States Office of Personnel Management, “Work-Life: Employee Assistance Programs,” <https://www.opm.gov/policy-data-oversight/worklife/employee-assistance-programs/#url=Overview>, accessed February 2017.

⁹ United States Office of Personnel Management, “Work-Life: Employee Assistance Programs.”

¹⁰ United States Office of Personnel Management, “Work-Life: Employee Assistance Programs.”

¹¹ Mark Attridge et al., “History and Growth of the EAP Field,” *EASNA Research Notes* 1, no. 1 (August 2009): 2, https://www.easna.org/wp-content/uploads/2010/08/EASNAResearchNotesNo1HistoryAUG2009081109_000.pdf, accessed February 2017.

¹² United States Office of Personnel Management, “Work-Life: Employee Assistance Programs.”

¹³ Matt Dunning, “Employee Assistance Programs Underutilized by Employees,” *Business Insurance*, January 5, 2014, <http://www.businessinsurance.com/article/20140105/NEWS03/301059979>, accessed February 2017.

¹⁴ Society for Human Resource Management, “2015 Employee Benefits,” March 2015, <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/2015-Employee-Benefits.pdf>, accessed February 2017.

¹⁵ Sharlyn Lauby, “Employee Assistance Programs (EAP) Can Improve Well-Being,” *WorkWell*, January 25, 2016, <http://workwell.unum.com/2016/01/employee-assistance-program-eap-can-improve-well-being/>, accessed February 2017.

¹⁶ Sean Fogarty, “C-Suite Increasingly Focused on Mental Health,” *Benefits News*, February 24, 2017, <https://www.benefitnews.com/opinion/c-suite-increasingly-focused-on-mental-health>, accessed March 2017.

less severe for 85% of EAP participants who received care for depression.¹⁷ Alcohol use decreased dramatically.¹⁸ While only 52% of employees reported high productivity before EAP assistance, about 81% did after.¹⁹

More recently, companies invested in employee stress-reduction programs. Some corporate leaders embraced mindfulness, a Buddhist practice of cultivating non-judgmental awareness of the mind's thought patterns, which research has found to reduce stress and improve focus.²⁰

Efforts researchers, managers, and regulators to improve employees' working conditions resulted in the legal protection of most workers in Westernized countries against excessive overtime, discrimination, and sexual harassment. Today, employees benefit from shorter work schedules, improved workplace conditions, and more paid time off for illness and health. Despite such efforts, only 30% of U.S. employees are engaged at work.²¹ Even worse, this has barely changed since 2006,²² meaning that the vast majority of employees worldwide are failing to thrive at work.

From corporation to individuals

Management's mental health footprint

Despite the \$15 billion U.S. companies spend annually on managerial and leadership development,²³ in addition to the nearly 200,000 MBAs awarded each year from American Institutions, most workers find their managers inadequate.

Even though most business schools, executive courses, and leadership programs promote a model of "servant leadership,"²⁴ which has been around since the 1970s, very few bosses apply it in practice, and very few organizations seem to reward it. Most leaders and managers lack the incentives and the skills to support their employees—to "serve them" in Robert Greenleaf's model.

¹⁷ Sean Fogarty, "C-Suite Increasingly Focused on Mental Health."

¹⁸ Sean Fogarty, "C-Suite Increasingly Focused on Mental Health."

¹⁹ Sean Fogarty, "C-Suite Increasingly Focused on Mental Health."

²⁰ Daphne Davis and Jeffrey Hayes, "What Are the Benefits of Mindfulness," American Psychological Association, April 19, 2010, <http://www.apa.org/pubs/journals/features/pst-48-2-198.pdf>, accessed March 2017.

²¹ "State of the American Manager: Analytics and Advice for Leaders", Gallup Report, December 2017, <https://www.gallup.com/services/182138/state-american-manager.aspx>, accessed October 2021.

²² Susan Sorenson and Keri Garman, "How to Tackle U.S Employees' Stagnating Engagement," *Gallup Business Journal*, June 11, 2013, <https://news.gallup.com/businessjournal/162953/tackle-employees-stagnating-engagement.aspx>, accessed October 2021.

²³ Dori Meinert, "Leadership Development Spending is Up," *SHRM*, July 22, 2014, <https://www.shrm.org/hr-today/news/hr-magazine/pages/0814-execbrief.aspx>, accessed November 2021.

²⁴ Center for Servant Leadership, "What is Servant Leadership?", <https://www.greenleaf.org/what-is-servant-leadership/>, accessed November 2021.

Over 50% of American workers claim their boss is mildly or highly toxic²⁵, and about the same fraction of employees have left a job “to get away from their manager at some point in their career,” found a Gallup study²⁶. According to a Korn Ferry survey,²⁷ 35% of employees mention their boss as the most significant source of stress at work, and 80% say a change in leadership, such as a new direct manager or someone higher up the organizational chart, impacts their stress levels.

The stress experienced by employees due to toxic or incompetent managers hurts company culture and its bottom line. Managers have a significant impact on employee productivity and business profitability: according to Gallup²⁸, they account for at least 70% of the variance in employee engagement.

Selection and promotion processes largely contribute to poor management practices. Most companies promote successful or loyal individual contributors into management. But being a successful programmer or salesperson doesn’t necessarily correlate with good management skills²⁹. Gallup believes that only 18% of current managers have the required managerial talent.³⁰ Only 30% focus on employee wellbeing.³¹

It can, therefore, be challenging for managers to care about team wellbeing, especially if more authoritative styles get rewarded. Lack of leadership models, hiring practices, and performance evaluations tend to nurture this dynamic, enabling a toxic culture that can lead to serious performance and health issues—and even death. It can contribute to manager burnout and to that of those around them.

When burnout and stress lead to more mental health leaves, already one of the most expensive health expenses in the U.S., it has a ricochet effect on individuals who remain. They worry about their colleagues and resent having to pick up the work. Even if they are willing to pitch, this increases their mental and emotional load. The same dynamics apply in voluntary and involuntary turnover.

²⁵ Talking Talent, <https://www.talking-talent.com/en-us/>, accessed November 2021.

²⁶ “State of the American Manager: Analytics and Advice for Leaders,” Gallup Report, December 2017, <https://www.gallup.com/services/182138/state-american-manager.aspx>, accessed October 2021.

²⁷ Korn Ferry, “Workplace Stress continues to mount,” <https://www.kornferry.com/insights/this-week-in-leadership/workplace-stress-motivation#:~:text=The%2520largest%2520source%2520of%2520current,chart%252C%2520impacts%2520their%2520stress%2520levels.,> accessed November 2021.

²⁸ “State of the American Manager: Analytics and Advice for Leaders,” Gallup Report, December 2017, <https://www.gallup.com/services/182138/state-american-manager.aspx>, accessed October 2021.

²⁹ Jack Zenger and Joseph Folkman, “Why the Most Productive People Don’t Always Make the Best Managers,” *Harvard Business Review*, April 17, 2018, <https://hbr.org/2018/04/why-the-most-productive-people-dont-always-make-the-best-managers>, accessed November 2021.

³⁰ “State of the American Manager: Analytics and Advice for Leaders,” Gallup Report, December 2017, <https://www.gallup.com/services/182138/state-american-manager.aspx>, accessed October 2021.

³¹ Tera Allas and Bill Schaninger, “The boss factor: Making the world a better place through workplace relationships,” McKinsey, September 22, 2020, mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-boss-factor-making-the-world-a-better-place-through-workplace-relationships, accessed October 2021.

Individual impact on emotional climate change at work

While there is a lot of research on the negative impact of bosses, there is less about the negative impact of individual employees. However, even if unconsciously, each individual contributes to the creation (or reduction) of its workplace emotional pollution. The impact of individual behaviors on the workplace culture can be very disruptive for managers and peers. Moreover, toxic behaviors can be contagious. The problem may start with one person. Those who work around or with or for disruptive individuals may begin to act differently and believe the organization has a high tolerance for such misbehavior.

In a 2016 survey conducted by Weber Shandwick, *Civility in America VII*:

The State of Civility³², 25% of employees said they had quit a job due to an uncivil workplace, and 87% indicated that workplace incivility has an impact on work performance. The effect is also considerable: while 55% of respondents said their morale suffered from colleagues' disruptive behaviors, 23% called in sick.

A supportive work environment is key to younger workers. In 2020, mental health reasons were cited by 68% of Millennials (50% in 2019) and 81% of Gen Zers (75% in 2019) as reasons to leave a workplace.³³

"Emotional polluters" do financial damage. According to the Center for Creative Leadership, they can cost up to \$8,000 a day³⁴ by eroding their work group's performance, motivation, and cohesion. This data highlights how individual actions can have a ripple effect and accentuate our wellbeing footprint on others. As for the collective environmental footprint, it starts with each action and impacts broader communities.

A wide range of behaviors exhibited by employees can create risks for other individuals and the organization. These behaviors often result from employees' own professional and personal mental health challenges, which a stressful workplace environment accentuates. Showing insubordination can manifest as "revenge" to the supervisor's mistreatment or even fear of being even more overworked. Displaying general insolence can involve rude and disrespectful speech, physical intimidation, demeaning statements, shouting, or slamming doors when displeased.

³² Weber Shandwick, Powell Tate, KRC Research, "Civility in America VII: The State of Civility", June 13, 2017, https://www.webershandwick.com/wp-content/uploads/2018/04/Civility_in_America_the_State_of_Civility.pdf, accessed November 2021.

³³ Kelly Greenwood and Julia Anas, "It's a New Era for Mental Health at Work," *Harvard Business Review*, October 4, 2021, <https://hbr.org/2021/10/its-a-new-era-for-mental-health-at-work>, accessed October 2021.

³⁴ Stephen Young, Jessica Glazer, and Sydney Siver, "Problem Employees Identify and Manage Them Before They Impact Your Business and Career," Center for Creative Leadership, 2018, <http://cclinnovation.org/wp-content/uploads/2020/02/problem-employees-ccl-white-paper.pdf?webSyncID=ed8a513d-3a6a-6419-3097-61a340459ec0&sessionGUID=d12381c8-8bba-c79c-97cb-dbc11aa38721>, accessed November 2021.

The 4 M's of Mental Health: Monitor, Mind, Manage, Measure

In the 1970s, to cut down on pollution and waste in the U.S., the Environmental Protection Agency (EPA) coined the three Rs: Reduce, Reuse, Recycle³⁵. Unfortunately, most individuals focus on recycling because it makes them feel as if they were doing something. It is easier than resisting or foregoing consumption and easier than re-using. We propose below a similar model – around four Ms – to combat emotional climate change at work.

Mind: Understanding our emotional footprint

The trauma and consequences of Covid put the spotlight on the issue of mental health at work. Companies have invested in self-care seminars, mindfulness programs, and mental health apps (the “recycling” part of the environmental model described earlier). More productive would be to go upstream and reduce the emotional pollution in the first place. Executives, managers, and employees can start by examining their workplace psyche and becoming aware of contributions. Humans are rife with emotions and deeply held views of the world and themselves, which they carry into the workplace, along with the survival mechanisms developed to deal with the uncertainty of the world and the angst of existence. Workers in any position need to reflect on their values and confirmation biases when assessing themselves and others.

Reacting to behaviors

Workplace interactions have been increasingly shifting online, becoming, as a consequence, less visible, and even encouraging people to be more abusive as they don't have to interact face-to-face with their interlocutors. Harassments and discriminating behaviors are also becoming more subtle, such as ‘intellectual bullying,’ in which individuals undermine others who do not share their intellectual abilities.³⁶ Setting rules and reminding workers of workplace conduct can help to address such behaviors. Workers' misconducts can't be ignored, rationalized or justified, but must be confronted. Managers and coworkers must step up and have frank one-on-one conversations, always maintaining individual privacy and confidentiality. Workers must also be careful to understand the broader context to advise if it is a team versus an individual issue.

³⁵ United States Environmental Protection Agency, “Reduce, Reuse, Recycle”, <https://www.epa.gov/recycle>, accessed November 2021.

³⁶ Leon F. Selzter, “Intellectual Bullies: What You Need to Know About Them,” *Evolution of the Self* (blog), *Psychology Today*, February 27, 2017, <https://www.psychologytoday.com/blog/evolution-the-self/201702/intellectual-bullies-what-you-need-know-about-them>, accessed June 2017.

Managing emotions

Emotions such as anger, sadness, joy, and fear may lead to undesirable behaviors and decision-making at work. Observing emotions can help build empathy and work with diverse and global teams.

The idea of emotional agility versus emotional rigidity was explored by the psychologist and executive coach Susan David. While emotional rigidity keeps people fixed on unhelpful thoughts, feelings, and behaviors (often linked to anxiety and depression), emotional agility enables people to respond to situations surrounding them by being in their thoughts and feelings.³⁷ This not mean banishing negative emotions but recognizing one's emotions and acting according to one's values and intentions. It has four stages:³⁸

- "Showing up": Notice your thoughts and emotions while treating yourself with compassion to not dwell on those that are destructive.
- "Stepping out": Recognize they are "just thoughts, just emotions" to move on from those that cause you distress. In doing so, we "keep our transient mental experiences from controlling us."
- "Walking Your Why": Keep your decisions and responses to your thoughts and emotions rooted in your fundamental values and goals. Your actions should reflect your values.
- "Moving On": Do not try to overhaul your entire self; instead, using your core values as your guide, make a multitude of small, purposeful changes to your daily life (the "tiny tweaks principle"). To stay motivated, you must balance "challenge and competence," take risks and push yourself, but not to the point that it is unmanageable.

Setting boundaries

The impact of managers' behavior can have a broader than expected impact on others. Individual small and simple behaviors can significantly improve workplace mental health, such as limiting after-hours emails or phone calls. Avoiding "facetimeing" at work and sharing travel plans may help normalize good habits. Being truly on vacation will also help others to follow and fully reenergize during their time off.

Monitor: Inflection points and early indicators

Many companies consider their human capital to be key to innovation and performance. Productivity lost due to poor employee mental health is becoming a priority issue for organizations.

³⁷ Susan David, *Emotional Agility: Get Unstuck, Embrace Change, and Thrive in Work and Life* (New York: Avery, 2016), p. 5.

³⁸ Susan David, *Emotional Agility: Get Unstuck, Embrace Change, and Thrive in Work and Life*, pp. 13-14.

Micro-signals can be the start of massive employees' burnout, resignation, or even suicides. There can present as changes in behavior patterns (such as increasing caffeine consumption, receiving more private mail or phone calls, or arriving late) or appearance (significant weight gain or loss, change in grooming). Working remote makes some of these harder to notice, especially substance use, but faces are easier to read, and individuals have been more forthcoming.

Individuals are often reluctant to approach an employee or peer about whom they are worried. Knowing that reaching out, being willing to check in, and eventually support a change in trajectory have a higher chance of succeeding when done earlier rather than later.

In addition, knowing when individuals may be particularly vulnerable is important—during personal and professional inflection points.

Individuals and companies remain exposed to inflection points which can considerably strain employees' emotional wellness. These include changes in personal lives (getting divorced, having a baby) and in technologies and business models that alter the way we work (freelance, on demand) or even put many workers out of work (automation).

Organizations committed to promoting workplace emotional wellbeing must monitor and provide specific accommodations to employees enduring major life events to ensure that the individual can perform at the same standards as their colleagues without being discriminated against.

Parenting The transition to parenthood can bring a change in identity, disruption in family's situation, and often, distress.³⁹ Financial and health issues may arise. In particular, the *post partum* phase can be particularly difficult for women, who often struggle with sleep and eating, and may feel anxious, overwhelmed, sad, and irritable. Post-partum depression affects around 10% of men⁴⁰ and about 11% to 20% of women.⁴¹ Even though fathers' presence time may alleviate some parental stress during this time, the U.S. doesn't grant any national paid paternity leave.⁴² Facing this gap in legislation, organizations can support employees, providing paid leaves or special accommodation for parents such as working from home or flexible work schedules, and considering leaves for miscarriages.

³⁹ Camilla W. Nonterah, Rachel C. Garthe, Chelsea A. Reid, Everett L. Worthington Jr, Don E. Davis, Joshua N. Hook, Daryl R. Van Tongeren, Brandon J. Griffin, "The impact of stress on fluctuations in relational humility as couples transition to parenthood," *Personality and Individual Differences*, Vol. 101 (October 2016) pp. 276-281, <http://www.sciencedirect.com/science/article/pii/S0191886916307577>, accessed May 2017.

⁴⁰ Jonathan R. Scarff, "Postpartum Depression in Men," May 1, 2019, *Innovations in Clinical Neurosciences*, US National Library of Medicine, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6659987/>, accessed October 2021.

⁴¹ "Facts About Postpartum Depression," Illinois Department of Women's Health, <http://www.idph.state.il.us/about/womenshealth/factsheets/pdpress.htm>, accessed October 2021.

⁴² World Policy Analysis Center, University of California, Los Angeles, by *The New York Times*, <https://www.nytimes.com/2021/10/25/upshot/paid-leave-democrats.html>, accessed October 2021.

Divorcing/Separating Divorce and separations often impact emotional wellbeing, routines, and finances. According to researchers, divorce is one of life's most stressful events.⁴³ Those separating may have feelings of guilt, anger, anxiety, restlessness or fatigue, experience disruption in sleeping or eating, and even be at risk of using more drugs or alcohol. Divorce also has a huge impact on a team's work performance: while employees' productivity can drop from 50% to 75%⁴⁴, managers and co-workers may become less productive due to increased responsibility while covering for an affected colleague.⁴⁵ Nearly 10% of employees lost their job as a result.⁴⁶

Grieving Grief is often a time of major stress for employees, who can be more vulnerable, hurt or easily rattled. Anger can come with grief, challenging key relationships at work and at home. Often, family and friends become impatient with the pace of recovery, just when the aggrieved feel most sad and reflective. Managers and co-workers should give the grieving person time to recover and be considerate when acknowledging the loss. The interaction should focus on the bereaved, not on shared emotions and desire to calm pain. It is better to avoid encouraging optimism, or suggesting that death might provide a sort of relief. Despite the importance of time to heal after a loss, most employers offer only four days for the death of a spouse or child, three days for the death of other close family members (e.g., siblings, parents), one day for an extended family member (e.g., cousins, uncles), and zero days for a friend or colleague.⁴⁷

Caregiving Employees can also face stress related to their responsibilities as caregivers, from raising children with developmental needs to looking for sick, elderly, or disabled relatives. While beneficial to families and society, caregiving can significantly impact an individual's mental health, with 2 in 5 caregivers considering it emotionally stressful.⁴⁸ Balancing caregiving responsibilities with workplace demands has forced a majority of caregivers to seek adjustments to their working hours or to take a leave from their jobs.⁴⁹ Caregivers may also decide to drop out of their employee-employer relationship and to opt to be self-employed to gain more work flexibility.⁵⁰ Research

⁴³ Thomas H. Holmes, Richard H. Rahe, "The social readjustment rating scale," *Journal of Psychosomatic Research*, Volume 11, Issue 2 (August 1967): pp. 213-218, ISSN 0022-3999, [https://doi.org/10.1016/0022-3999\(67\)90010-4](https://doi.org/10.1016/0022-3999(67)90010-4), accessed May 2017.

⁴⁴ Deborah Moskovich, "Downgrading Divorce from Crisis to Process in the Workplace," *The Huffington Post*, May 1, 2012, http://www.huffingtonpost.com/deborah-moskovitch/downgrading-divorce-from-_b_1248497.html, accessed March 2017

⁴⁵ Deborah Moskovich, "Downgrading Divorce from Crisis to Process in the Workplace."

⁴⁶ Owen Bowcott, "Relationship Breakdowns Have Negative Impact on Business Productivity," *The Guardian*, November 25, 2014, <https://www.theguardian.com/lifeandstyle/2014/nov/26/relationship-breakdowns-business-productivity-employees-divorce-separation>, accessed March 2017.

⁴⁷ SHRM Survey Findings: Paid Leave in the Workplace, October 6, 2016, <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/2016-paid-leave-in-the-workplace.aspx>, accessed October 2021.

⁴⁸ "Caregiving in the U.S. 2015," AARP Public Policy Institute and the National Alliance for Caregiving, June 2015, pp. 9-10, http://www.caregiving.org/wp-content/uploads/2015/05/2015_CaregivingintheUS_Final-Report-June-4_WEB.pdf, accessed March 2017.

⁴⁹ "Caregiving in the U.S. 2015."

⁵⁰ "Caregiving in the U.S. 2015."

suggests that providing counseling options and connecting caregivers to resources for the whole family can considerably help to reduce the burden of caregiving.⁵¹ Providing counseling support to the spouse of a dementia patient can help reduce depression.⁵²

Modulate: Building a supportive emotional ecosystem

Job design and employee fit are central to mental wellness and stress reduction in the workplace. Besides recruiting workers only based on past experiences, success, or skills, it is critical emotional fit and ability with the organization, position, and superiors. A manager used the analogy of a car to explain how to look for a balanced candidate: “you need a strong front wheel-steering, which is your vision, your values, and emotional stability. You can think of the back wheel as your drive, motivation, and horsepower. If you have a lot of horsepower but drive in the wrong direction, you can do a great deal of damage.”⁵³

Think about how and where employees work

Full-time employees spend 33% of their weekly waking hours at work. When Covid sent employees home, management had to reflect how and where individuals were working. Both at home and work, how we work physically affects how we function emotionally. Workers increasingly demand more flexible work arrangements, fewer constraints, and more autonomy. Less facetime puts more emphasis on deliverables, however. Recognizing multiple modalities towards productivity is essential—as well as the particular stressors they pose, as has become clear in COVID.

Build Teams for Mental Wellness: Most organizations focus on tasks when making hiring or staffing decisions. In addition to ascertaining fit to perform a task, recruiters can use behavioral interviewing to assess the emotional ability to cope with the task. The focus is shifted towards employee wellbeing.⁵⁴ According to Harvard professor Amy C. Edmondson’s, organizations need to build “psychological safety” so “an environment in which individuals can safely speak up and disagree with each other.”⁵⁵ Encouraging employee participation and individual accountability can help to nurture a safe workplace environment.

⁵¹ “Caregiving in the U.S. 2015.”

⁵² “Caregiving in the U.S. 2015.”

⁵³ *Compassionate Management of Mental Health in the Modern Workplace*, p 70.

⁵⁴ *Compassionate Management of Mental Health in the Modern Workplace*, p 80.

⁵⁵ Amy C. Edmondson, “Teamwork on the Fly,” *Harvard Business Review* 90 (April 2012): 72-80, via EBSCOhost, accessed January 2017.

Provide constructive and positive feedback: According to McKinsey,⁵⁶ validating feelings, withholding judgment, and offering support can bolster motivation and foster authenticity in the workplace. One study compared athletes who received unconditional positive comments from their coaches with those who received criticism. The former group experienced increased confidence, greater love for the sport, and more persistence through challenges. The latter group felt less secure, less motivated, and tended to wear out more quickly.⁵⁷ The same pattern has been found valid for teachers and students, and it applies to bosses and the people they “coach” in the workplace⁵⁸. Positive regard contributes to developing an individual’s sense of autonomy and self-competence, directly linked to greater satisfaction and wellbeing at work.⁵⁹

Provide space for communication: One-on-one meetings can be helpful in proactively identifying workplace stressors before becoming unmanageable. It is critical to provide time and personalized support to employees, making them feel valued. Beginning the sessions by checking in with employees with the essential “how are you doing?” “demonstrate awareness about the demands they face. While 80% of Millennials reported their preference for regular feedback, 85% would like to meet with superiors more often.⁶⁰ Employers who have adopted this new framework say it has boosted morale and reduced burnout.⁶¹

Promote social interactions and ties to the community While improving a firm’s reputation,⁶² initiatives encouraging employee involvement in the community can be a powerful way to enhance employees’ ties to the company while making them happier and healthier⁶³. According to Professor Ashley Whillans from Harvard Business School, prosocial spending and giving has proven to be effective in improving individuals’

⁵⁶ “Being a good boss isn’t easy – here’s how to get better,” Tera Allas and Bill Schaninger, McKinsey, October 18, 2021, <https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-organization-blog/being-a-good-boss-isnt-easy-heres-how-to-get-better>, accessed October 2021.

⁵⁷ Lauren Kelly McHenry, “A qualitative exploration of unconditional positive regard and its opposite constructs in coach-athlete relationships,” University of Tennessee, May 2018, available on trace.tennessee.edu, accessed October 2021.

⁵⁸ “The boss factor: Making the world a better place through workplace relationships,” Tera Allas and Bill Schaninger, McKinsey, September 22, 2020, <https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-boss-factor-making-the-world-a-better-place-through-workplace-relationships>, accessed October 2021.

⁵⁹ “The boss factor: Making the world a better place through workplace relationships,” Tera Allas and Bill Schaninger, McKinsey article, September 22, 2020, <https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-boss-factor-making-the-world-a-better-place-through-workplace-relationships>, accessed October 2021.

⁶⁰ Rob Hernandez, “Here’s What Millennials Want from their Performance Reviews,” *Fast Company*, November 3, 2015, <https://www.fastcompany.com/3052988/the-future-of-work/heres-what-millennials-want-from-their-performance-reviews>, accessed March 2017.

⁶¹ Rob Hernandez, “Here’s What Millennials Want from their Performance Reviews.”

⁶² John Boitnott, “4 Ways Your Company Benefits From Giving Back,” *Entrepreneur*, January 27, 2015, <https://www.entrepreneur.com/article/241983>, accessed February 2017.

⁶³ Joseph D’Urso, “Giving to Charity Makes You Happy, Middle Age is Miserable: Experts,” *Reuters*, September 4, 2015, <http://www.reuters.com/article/us-charities-health-happiness-idUSKCN0R40L620150904>, accessed February 2017.

wellbeing⁶⁴. While her research suggests growing evidence that helping can promote happiness, her work also provides some of the strongest evidence to date that prosocial behavior can lead to clinically relevant benefits for physical health⁶⁵. Other research has shown that workers who volunteer have lower turnover rates and exhibit stronger attachments to their employers.⁶⁶

Increase flexibility around paid time off: Organizations have been increasingly taking various measures aiming to prevent employees' burnout, such as increased vacation time, unlimited vacation banks, or assigning workers to shift rotations to reduce repetitive tasks⁶⁷. Some firms implemented 40 max hours workweek and encouraged employees abstain from work responsibilities outside set work schedules⁶⁸. Large companies such as Deloitte and Intel have offered work sabbaticals to give employees a break⁶⁹

Measure: Tracking and evaluating emotional climate change

Any organization choosing to make workplace mental health a priority and promote it actively should first monitor and track early indicators of mental unwellness to measure the effectiveness of new initiatives. Once early indicators are recognized, they must be followed and periodically reevaluated to measure the effectiveness of new initiatives affecting employees' mental health. Organizations must ask themselves: are signs of depression increasing among employees? If so, why? How can we best mitigate work stressors and support people at work? Are there generational or gender differences to take into account? How do we best measure workplace mental wellbeing? What is important to measure? What we measure and how we measure it informs what we pursue and where we need to focus. When getting it wrong, companies find themselves missing essential insights to tell where to act⁷⁰.

⁶⁴ Aknin, Lara B., and Ashley V. Whillans. "Helping and Happiness: A Review and Guide for Public Policy." *Social Issues and Policy Review* 15 (2021): 3–34, DOI: 10.1111/sipr.12069.

⁶⁵ Whillans AV, Dunn EW, Sandstrom GM, Dickerson SS, Madden KM. Is spending money on others good for your heart? *Health Psychol.* 2016 Jun;35(6):574-83. doi: 10.1037/hea0000332. Epub 2016 Feb 11. PMID: 26867038

⁶⁶ Adam M. Grant, "Giving Time, Time After Time: Work Design and Sustained Employee Participation Incorporate Volunteering," *Academy of Management Review*, 2012, https://faculty.wharton.upenn.edu/wp-content/uploads/2013/04/Grant_AMR2012.pdf, accessed February 2017.

⁶⁷ Yuki Noguchi, "Preventing Worker Burnout Can Boost the Bottom Line," NPR, September 30, 2014, <http://www.npr.org/2014/09/30/352751249/preventing-worker-burnout-can-boost-the-bottom-line>, accessed March 2017.

⁶⁸ Rachel Feintzeig, "What Worker Burnout Feels Like," *The Wall Street Journal*, February 28, 2017, <https://www.wsj.com/articles/what-worker-burnout-feels-like-1488286802?tesla=y>, accessed March 2017.

⁶⁹ Rachel Feintzeig, "Cure for Office Burnout: Mini Sabbaticals," *The Wall Street Journal*, October 28, 2014, <https://www.wsj.com/articles/cure-for-office-burnout-mini-sabbaticals-usually-with-full-pay-1414540995>, accessed March 2017

⁷⁰ Raffaele Carpi, John Douglas, Frederic Gascon, "Performance Management: Why keeping score is so important, and so hard," McKinsey, October 4, 2017, <https://www.mckinsey.com/business-functions/operations/our-insights/performance-management-why-keeping-score-is-so-important-and-so-hard>, accessed October 2021.

How do we create trust, instill ownership and build accountability to reduce organizational footprint and impact emotional climate change? The section “Accounting for Human Sustainability: Helping and rewarding companies for measuring and reducing their human impact and employee burnout” provides a detailed description of the Human Sustainability Index, a suggested set of outcome-based metrics helping to assess the firm performance according to its goals for workplace mental health/emotional footprint.

New imperatives for the future of sustainable work

Companies that focus more on “building in” mental health – much as the total quality movement showed us how to do decades ago—can hope to reduce negative impacts on their staff. This requires top-level commitment, elevating mental health to the C-suite, and enrolling workers into co-creating benefits.

First, managers need explicit training and guidance. Managers need to recognize signs of distress among their people, both directly through conversations and indirectly through observation. H.R. should advise managers on how best to broach sensitive subjects arising from the COVID-19 pandemic, including alternative work models⁷¹, job security and prospects, staffing impact, and workplace tension. This guidance can include discussion guides, training, or email reminders with the latest updates on the situation and general principles for dealing with it. Training should also include understanding the Americans with Disabilities Act and rules around accommodations and mental health leaves.

Managers must also break down stigmas related to mental health, making it a topic that can be openly and honestly discussed in a safe and supportive environment rather than a taboo subject to avoid. Using statistics and facts showing that mental health issues affect millions in the U.S. and worldwide may help employees understand the landscape and feel less alone. Sharing one’s vulnerabilities, experiences and challenges will encourage others to follow and help to build trust and a safe environment.

Second, the promotion process needs to reflect stated company values. Managers are often promoted and rewarded for high performance but not for the mental wellness they encourage among their reports. If you value our employees and their emotional health, incentives should be better aligned to reflect that. Some companies ask staff explicitly if they feel that their manager cares and has taken steps to cultivate mental wellness among staff members. If you are considering someone for a promotion, ask them about their point of view and perceived track record on this topic. Do they view people as investments or as costs?

⁷¹ Jackie Wiles, “With Coronavirus in Mind, Is Your Organization Ready for Remote Work?”, July 23, 2020, Gartner insights, <https://www.gartner.com/smarterwithgartner/with-coronavirus-in-mind-are-you-ready-for-remote-work>, accessed November 2021.

Third, employees need to be allowed to co-create benefits and share a sense of purpose. Encourage employees to share their ideas and needs to improve their wellbeing at work, providing a sense of agency among employees, reducing stress levels. It also allows organizing to move away from inefficient one-size-fits-all solutions to provide more effective and personalized mental health care.

For example, creating a “company benefits fund,” where employees could select a range of wellbeing offerings to accommodate their needs better. Companies have “green teams” that promote sustainability – they could have “mind teams.” In addition, a direct link between individual performance and the achievement of business goals can boost employee confidence in the importance of their job even in a challenging business environment. Human resources leaders can help managers reassert the link between employees’ work and organizational success by providing visibility into the organizational goals and translating the organization’s vision into their employees’ context.

One of the top engagement drivers for employees is indeed seeing their work contribute to company goals. Employees who feel confident about the importance of their job to the organization’s success feel less anxious about their job security⁷². However, it is critical for organizations not to make superficial makeovers or unfulfilled promises that may backlash and weaken trust. Leaders and managers must indeed “walk their talk” and stand as role models for the rest of the organization.⁷³

Finally, nominate a Chief Mental Health Officer and Wellness Committee. If mental health is to be strategic, it needs to be treated as such. Organizations can think about assigning a Chief Mental Health Officer in charge of manager training, work and workplace design, and mental wellness such as overseeing programs, estimating risks, dealing with liability implications, training management, or providing a different lens to strategic decisions. Companies can also invite employees to create Wellness Committees responsible for promoting ESG goals and championing Human Sustainability at work (see proposal below).

Accounting for Human Sustainability: Helping and rewarding companies for measuring and reducing their human impact and employee burnout

The global pandemic made mental health an imperative for organizations. Increased isolation, uncertainty, and stress due to lockdowns, large-scale remote working, and

⁷² Mary Baker, “9 Tips for Managing Remote Employees,” Gartner, January 4, 2021, <https://www.gartner.com/smarterwithgartner/9-tips-for-managing-remote-employees>, accessed October 2021.

⁷³ Robert E. Quinn and Ajay V. Thakor, “Creating Purpose-Driven Organizations,” *Harvard Business Review*, July-August 2019, <https://hbr.org/2018/07/creating-a-purpose-driven-organization>, accessed October 2021.

blurred work-life boundaries have pressured employee stability⁷⁴. This challenge has pushed companies to understand better, measure and, protect the mental wellbeing of employees. In an increasingly knowledge-based and remote workplace, employee wellbeing is more important than ever for business performance and economic productivity.

Most ESG-focused investments and corporate social responsibility initiatives have focused on the firm's impact on the environment and society. Rarely do they focus narrowly on individual employees. The SEC is currently taking a closer look at disclosures⁷⁵. While regulators punish environmental polluters, no sanctions exist for a poorly-run organization's pollution of their employees. Even in the best of times, society bears the brunt of the externalities of bad management through rising inequality and mental health disorders. In a pandemic that has rendered employees increasingly psychologically and economically vulnerable, poor management and policies are a recipe for deep distress, poor productivity, and loss of life.

It is becoming imperative for companies to assess their impact on human lives, starting with employees. To that end, businesses must define monetizable outcome-based metrics and incorporate new frameworks to manage and comparably measure their impact on the humans they touch.

We have devised the Human Sustainability Index (HSI) to bring a new lens to the business world. One that believes that century-old financial metrics no longer reflect the real source of corporate value and performance in an intangible economy: Human Capital. HSI focuses on three dimensions:

- Outcome-based, measurable, and monetizable metrics help companies assess employees' mental health equity and performance, workplace satisfaction, and related cost savings.
- A new accounting methodology and certification enables investors and consumers to reward companies according to how they impact the creation or destruction of Human Capital.
- Actionable insights show corporate decision-makers how they impact the humans they touch and how they would develop such a process of evaluation and "certification."

The HSI is a set of outcome-based metrics to assess the firm's performance according to its workplace emotional footprint. Metrics should be defined by working closely with executives, H.R., and staff. Before this process, the firm's leadership must reflect on

⁷⁴ "How to measure mental health at work", People Matter, <https://www.peoplematter.tech/measure-mental-wellbeing-at-work>, accessed November 2021.

⁷⁵ Commissioner Allison Herren Lee, "Regulation S-K and ESG Disclosures: An Unsustainable Silence", U.S. Securities and Exchange Commission, August 26, 2020, <https://www.sec.gov/news/public-statement/lee-regulation-s-k-2020-08-26> accessed November 2021.

its purpose, principles, and willingness (or rather courage) to commit and implement concrete actions. These metrics can be tracked and reported as part of ESG programs. They can become more explicitly part of how investors think about a company's impact on the emotional pollution – and reward those whose actions offset it.

If we know how to account for costs, we can also measure positive benefits (be they engagement, well-being, productivity, creativity, cohesive culture, etc.). We know that the ROI can be enormous: a meta-analysis of the literature on the impact of workplace wellness programs on organizational expenses and savings found that medical and absenteeism costs fall respectively by about \$3.27 and \$2.73 for every \$1 spent on wellness programs⁷⁶ The possibilities are as great as the human spirit we could unleash.

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New technologies` impact on workforce and labor law

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Abstract

If we look back, evaluating the last two centuries, the productive environments of our societies have experienced several industrial revolutions that caused great changes in production and that, in turn, generated important changes in societies at all times.

Likewise, the digital transformation that has been incorporated into the bases of companies, each one in its measure, has not yet reached its maximum potential, but it has changed the way we live and, therefore, the way we work.

Historically, automation has come from the hand of specialization, not because of the manufacture of tractors the land has been stopped, but more has been produced and that production has been managed in favor of employment and economic health. Technological transformations hand in hand with digitalization and artificial intelligence generate opportunities, but they also represent a threat to a good part of traditional jobs and professions, since changes are rapid and the impact of new technologies is much greater; thus, the change in the training and qualification of workers is necessary.

Like the looms in the 18th century and the production models at the beginning of the 20th, digital transformation is our present, but it will be much more powerful in the future, as it entails and will entail a redefinition of the labor market and the law that governs it. regulates. Globalization and technological changes have generated a need to address labor law from a global perspective; Furthermore, this right must not only be active, but also effective, solid, in accordance with international decent work standards.

Keywords: technologies; new technologies; work and labor law.

Introduction

The loss of jobs due to automation and new technologies` deployment also leads to an increase in wage inequality in the labor market between groups of highly qualified workers and the large numbers of people trying to access jobs that require less

training (European Commission, 2019). In this regard, the European Commission manifests itself in its study on the impact of digitization on the labor market, published in February 2019, in the forum of the High-Level Conference on the Future of Work.

The impact of new technologies and their dizzying progress affect labor law severely. We act and legislate based on the needs of society, but when the corporate culture does not adapt to these changes, we find ourselves faced with temporary contracts, unusual hiring methods and precarious quality of work, that is when legal action becomes necessary. and essential legislative intervention.

In the corporate culture that starts from the generation of profits, investment in technology is evident in almost all areas of production to the detriment of certain jobs and, not for this reason, positive signs of economic and business health are lost. Human employment does not have to disappear in favor of robotics, the only thing that must be valued is whether we are capable of managing efficiently, recognizing that we are not essential in the production process; not work it disappears, in fact, jobs are lost in various specialties that are run by robots, creating different specialties; thus, employment evolves.

Considering these brief reflections, the essay collects that the new forms of work opened up by digitization could generate “winners and losers”, as well as “a deepening of the polarization of the labor market, unless adequate political responses are adopted” (Thyssen, in High Level Conference, UN, 2019).

The reflections are based on the evidence of constant technological changes and their integration into the labor market, for which it will be reflected on the basis of the values formulated by international organizations and researchers, in order to present a synthesized vision of whether the technological revolution and Labor law does or does not go hand in hand, if fundamental rights are affected and if the current higher education system is addressing the future needs of the labor market.

It will be discussed if these training needs of a labor market in constant and vertiginous change are within the governmental perspective and if the stakes of the States, specifically in Spain, are at the level of the immediate future or, on the contrary, are incongruous according to the standard of living of the population that must adapt to the advancement of new technologies.

The transformations that are taking place in the production process and the economy demand policies for education, training and the provision of income within globalization implies inclusion, hence, government policies must be oriented to address the change driven by technological evolution. (Arenas F, Bayón P 2020). In the same way, given that the impact on labor law of the technological revolution is evident, through a study of doctrine, it will be assessed whether these new technologies in the labor market

and in the rules that regulate it, are being addressed in line with their evolution or if we are lagging behind.

ICT: Information and Communication Technology

The expression ICT is the acronym for Information, and Communications Technology and refers to the theories, tools and techniques used in the treatment and transmission of information, it is then where reference is made to computer science, internet and telecommunications.

A complete definition of the ICT concept can be the following: “set of technologies that allow the acquisition, production, storage, communication processing, recording and presentation of information, in the form of voice, images and data contained in signals of an acoustic nature, optical or electromagnetic” (Campuzano tome, 2000).

ICTs have become a very important tool in contemporary society, so much so that data on the standard of living of a population are taken into account in studies on the economic development of a country.

In more developed societies, ICTs have an important reach either in people's lifestyles or in the “know-how” of companies, given the spread of internet-based applications, electronic commerce, mobile phones. and all the platforms that allow the development of the Information Society.

Since 2008, the year of the beginning of the economic recession, ICTs have greatly increased their diffusion, because they allow companies to have a more sustainable business model and a greater capacity to create added value (Gorrin, 2011).

Undoubtedly, the constant evolution of technology has led to equally rapid changes in the world of work. Consequently, the concept of the office is also evolving, because it must be understood as a set of relationships and not as a physical space in which to carry out the work provision.

All these changes would never have been possible without the evolution of technology and, in particular, without the development and diffusion of ICT (Information and Communication Technologies).

ICTs are the “set of technologies that allow the acquisition, production, storage, treatment, communication, recording and presentation of information, in the form of voice, images and data contained in signals of an acoustic, optical or electromagnetic nature” (Campuzano tome, 2000).

Thanks to the use and implementation of ICT, the transmission of information has become much easier and cheaper, because telecommunications networks make it possible to transmit information almost immediately regardless of the distance to travel.

In this way, the role of information in society has totally changed, because it has become a determining factor in production, until it is considered a true commodity (AA., 2000).

Consequently, there has been an increase in competitiveness and an ever-increasing opening of markets, factors that companies must take into account to guarantee their survival and to be competitive in the markets.

The world of work has been revolutionized by the introduction of computer technology, which has transformed the organization of work, especially from the point of view of the production process and business management (Rubert, 2003).

In relation to labor relations, ICT and all telematics tools have streamlined work and revolutionized labor relations, so it is necessary that the legal system also continue to adapt to the new reality that it must face.

From the point of view of the company, without a doubt, the productive activity has been significantly simplified, because it has been streamlined and facilitated, but, from the point of view of the workers, it has been necessary to modify the personnel management system and that it has led to an increased potential risk of violation of fundamental rights.

In relation to work and companies and their workers, ICTs have increased the possibility for companies to produce better quality work and in shorter times. This translates into a greater amount of free time for workers, leading at the same time to a change in the relationship between clients and workers and between workers and companies. So the use of ICT can be seen as a positive change as long as it is used in a good way.

Therefore, it is important to provide workers and all users with a good and correct digital education, in order to avoid leisure in the offices or the lack of competitiveness between companies. Digital education is once again an element of growing importance for a responsible and positive use of new technologies by users, workers or companies that are and to get the most out of the use of ICTs.

As we have analyzed in the first chapter of this work, the regulation of remote work also involves the regulation of telework, in order to include in the Spanish legislation this new form of work that has found a growing diffusion in Europe in recent years (Bayón and Zerbi 2020).

Work and new technologies: generalities

The sustainable development goals, which include commitments to tackle poverty, promote gender equality, decent work and protect the environment, are the highlights of the United Nations Common Agenda for the next ten years.

Decent work is a pressing need. More than 75 million young people are unemployed, temporary employment rates have reached unknown standards before the crisis, there are more than 2.5 million workers who die annually due to labor causes, discouraging data if, in addition, we delve into the figures of child labor: 155 million children. In addition to this, with salaries of 200 euros per month in internal domestic service with payroll payments of 1 month every 2 years, available 24 hours a day, seven days a week; not to mention the “classic slavery” already believed abolished and with very active foci thanks to the mafias that take advantage of desperate migrations or simply situations of impunity and abandonment. (Giménez, 2019)

The new types of work emerged from the development and application of new technologies, provide different contractual forms. Where previously there was work at home, there is now remote work. The widespread use of new information and communication technologies in the workplace is absolutely widespread and has changed the rules of the game, since computer tools are used to develop jobs that, in the past, were only performed in person; there is no area where a resource linked to new technologies is not present.

However, in the midst of these scenarios, we must question the fundamental rights of workers. The need for discipline and control of production, for example, through the schedule and geolocation, do not stop interfering in the personal life of the worker, who carries a geolocated mobile phone that accompanies him all day to facilitate his precise location, is or not within your workday. The legal systems have so far given an insufficient answer. In the Spanish case, no answer has been given to these new problems.

It has been through judicial doctrine that a response has been obtained to this confrontation between the rights of the workers and the claims of the companies, the needs for the organization of productive activities, the need for control and surveillance of both the workplace and the workers, use of email, internet, mobile phone, among others.

Artificial intelligence and robots at work. Vision of digital news.

In the course of technological evolution, initially, machines helped men, who ran them completely; meanwhile, the man was enjoying his internet connection. Later, in a dizzying way, we transcended the phase of absolute dependence on the internet; now it is the machines that connect to the internet to help us. For Santos “the next phase, which is imminent, will consist of things (robots) interacting with the environment autonomously and independently of human control, with the possibility that people combine with robots to improve themselves (cyborgs)” (Santos G, 2017.p.27.)

New situations in need of regulation will arise and, for this, some steps have already been taken; highlighting, at the European level, the preparation of a report containing the recommendations for the Parliament's Commission on Civil Law rules on robotics so that robots are and continue to be at the service of human beings (Delvaux, 2015).

However, a not so friendly face of digitization is that of the double face of the leading companies in digital and robotic technologies, for example, Amazon. According to Olias, (2019) citing LinkedIn, he explains that in his study Top Alphabet List e 2019, Amazon ranks third among the best companies to work for in the US, 75% of employees would recommend their relatives and friends to work in it, but Olias proposes "Corporate Amazon", that of meeting rooms, rest places, futuristic spaces, and fruit in the office for everyone (Oliás, 2019).

The Amazon's warehouses is managed and administered by a software that automatically decides which workers to fire if it detects that they do not meet the objectives set, it is capable of measuring the pauses to go to the service, detects all activities employees make during their work day and sends alerts if it detects that they are not doing the work the way they should do.

This type of tool is already very widespread in different companies and jobs, especially in the production chains, but, in the case of Amazon, the pressure is very high and the productivity objectives are increasing, it has generated severe criticism and complaints. by its workers, who have even reduced their visits to the toilet even to avoid receiving these alerts.

In another vein, the need for professional retraining in the face of the new labor paradigm posed by new technologies poses challenges for the present and future of Spain. Given the situation we are facing with technological advances, they require professionals with specific skills and the educational system of the future must be prepared to face this new era. In Finland, for example, automated companies demand specialized professionals, but find that the training offer has not provided enough workforce with the necessary competencies and skills for that labor market. (Bayón 2019)

Where are we going?

The World Economic Forum (2016) pointed out that, in about five years, the world's main economies will lose up to seven million jobs, of which two million would be recovered through new trades. The resulting balance, five million, represents around 0.3% of total jobs in the economies considered by the aforementioned instance.

For its part, the Organization for Economic Cooperation and Development (OECD, 2017), based on the levels of labor qualification, points out that the risk of automation depended largely on the characteristics of each territory, going from 40% in some Eastern European

regions, up to 4% in areas where skilled employment is the norm. Considering the risks indicated by the OECD, Spain represents a range of 20% of the population and 30% that will face significant changes in its employment model. (Grasso, 2019).

Middle-class jobs, the gap that remains between the production and technological poles, where the wage cost is below the cost of automation, are the ones that suffer the most from these consequences. More than thinking about the jobs that will survive, we will have to assess and work to determine what the work of the future will be like and the legal regulatory framework we can reach. (Grasso, 2019).

The World Economic Forum has used data from LinkedIn (2015) to identify and project the trends of the most searched profiles between 2013 - 2018; It is observed that all require a lot of training and very high technical skills. Likewise, 313 executives of multinational companies were consulted about which tasks will be the most likely required in the short term, from which it emerged that they will be data analysts, scientists and specialists in artificial intelligence, as well as experts in Big Data and transformation. digital

The need for professional recycling in the face of the new socio-labor paradigm. Present and Future in Spain. They need to recycle labor given the situation we are facing with this new socio-labor paradigm is fundamental, the technological changes in which we are immersed are profiling professionals with specific skills and the educational system of the future must be prepared to face this new era.

As professor Bayón (2019) cites, in Finland, for example, automated companies demand specialized professionals but find that the training offer has not provided enough workforce with the skills and abilities necessary for that labor market.

Are we in Spain facing that same paradigm? Are we doing what we can so that our workforce of the future is able to cope with the impact of new technologies on the labor market? 40.5% of job offers in Spain require, at least, a university degree, according to the VIII Adecco Infoempleo Report (2017) on degrees with more professional opportunities.

The Degrees with high employability, which are the degrees that find more offer than graduates, are those that include general engineering, especially computer engineering and telecommunications.

And on the contrary, the degrees with low employability are those found in the Arts and Humanities, such as Geography, History, Political Science or Journalism. The career profiles of the Universia España STEM (2018) (Science, Technology, Engineering and Mathematics), among which are the sciences, are the most demanded in a labor market where technological and scientific innovation is the norm.

All these STEM profiles coincide in the practical approach of their competencies and in the value of creativity to develop their profession effectively. Universia Spain. (2019). Technical careers and certain engineering have always been the training with the best job opportunities, but with the digital age, STEM profiles are even more necessary and attractive for the job market. The types of studies that this field encompasses include all the careers necessary to develop or implement all the technological innovations that we currently have.

But the offer goes much further, Universia (2019) the training of professionals with technical excellence is being the objective of European Universities, where there are also alliances through Higher Studies and Postgraduate Centers and in consensus with business partners and entrepreneurs to create educational platforms where students become part of an ecosystem of entrepreneurs, companies, researchers and alumni from all over Europe who are exquisitely qualified at a technical level.

Challenges of the Future

The former Commissioner for Employment, Social Affairs, Skills and Labor Mobility of the European Union, Marianne Thyssen, presented in mid-2018 the strengthening of the European Globalization Adjustment Fund (EGF) with the aim of ensuring that people have adequate skills and ensure modern and effective social protection, adapted to new forms of work. The premise is to protect people, over jobs. Ortega (2018), researcher at the Real Instituto El Cano affirms "Those who lose their job due to automation are not prepared for the new jobs. Not enough is being invested in upskilling or upgrading professional skills. "

To address all these problems, hand in hand with digitization, states are faced with the challenge of introducing innovation and digitization in all fields of the economy and society through:

- The design and implementation of a new plan for the deployment of digital infrastructure; that allows you to closely follow the leading powers.
- Investment to make digital technologies possible.
- Creation and implementation of programs to promote skills and talent.
- Training and retraining of workers (upskilling).
- Labor legislation in accordance with new jobs and new forms of production.
- A national strategy on artificial intelligence to sustain social security systems for jobs that disappear and are replaced by robots and that they continue to produce important economic and time contributions.

Nubler (2017), an economist at the International Labor Organization says that times of great change need collective learning so that societies and economies can transform.

The same happens with legal concepts that sooner or later transfer ideas and phenomena that appear in society to law.

The employer's control over remote workers

The Spanish legislator has updated the old form of work from home, through the reform of art. 13 ET. In relation to the surveillance of the employer, in the home work contract, as previously regulated, there was no type of control or business surveillance, since the employer wanted a specific result. At that time, one of the peculiar characteristics of the form of home work was the specific reference to the "absence of supervision from the employer".

As well as to develop the power of direction, which is a requirement connected to the nature of the dependency and, therefore, in home work this form of connection between the employer and the worker is not found because it is very "diluted".

After the reform to art. 13 ET, the legislator has regulated the form of remote work, with the intention of including teleworking, giving a regulation to the new forms of work and labor relations already existing in the world of work.

In relation to this new regulation, it is necessary to specify that the characteristics of this type of employment relationship that entail changes also in the field of surveillance and control by the employer, since, especially in teleworking, technological means are used.

Then the employer "can and should reserve the possibility of monitoring in the performance of work" (Molinera, 2018)

With particular reference to the form of teleworking, control by the employer is very important, since the worker often uses means provided by the company to carry out the work service and control can be provided by technological means, always respecting the fundamental rights of workers.

In relation to the management power of the employer, the dependency relationship between employer and worker is more relevant in the field of teleworking, since there should be a protocol for the fulfillment of the work obligations of employees.

In teleworking, especially, as has been illustrated on several occasions, the use of new technologies is essential for the development of the labor provision, so new technologies become a fundamental tool for the worker and, many times, technological instruments are provided by the same employer.

On the other hand, technology can be a control instrument to supervise and guarantee the effectiveness of the business organization, as well as the performance of all the people who are part of an organization.

These instruments must confront the fundamental rights of workers and, also, with the use that workers make of the technological tools at their disposal.

In the first place, it is interesting to analyze how the abusive use of these technological means provided by the employer for different purposes can be considered as an economic damage. In fact, the worker has spent time complying with his work obligations, dedicating himself to other people's issues and, in addition, he has threatened the security of the same employing company because potentially they are sensitive data of the company that could have left the same and be employees for purposes other than employment.

On the other hand, the rights of workers and all those related to their privacy must be taken into account. As a consequence, controversies that are not easy to resolve arise.

Currently, technological advances allow an exhaustive control of the worker's work activity through software or spy programs that monitor compliance with the work provision and, at the same time, allow data and images to be stored and their treatment for different purposes.

The data and images are stored on media owned by the same employing company and allow the employer to analyze the profile of their workers, by examining them at their complete disposal. Today, worker control is developed with advanced tools and it is no longer possible to speak of a direct control similar to strict surveillance because it is a more discreet control system that, at the same time, is more penetrating and punctual and, especially continuous.

The control that the employer carries out is a control that extends throughout the worker's entire day, not only in relation to the working day, but to the worker's entire life, storing data related to their private and other people's lives to the fulfillment of the labor benefit.

An ethical question about the control by the employer is evidenced, since the fundamental rights of the workers must be taken into account, as well as the right of control and direction by the employer in relation to the fulfillment of the labor provision.

Certainly, the power of control of the employer is an important faculty because it allows the employer to monitor productivity and their respective individual and collective differences with respect to final productivity and, in the event of a voluntary decrease in performance by a worker, the control of this situation leads to a legitimate dismissal.

If we interfere in the role of the employee, the constant control of their activity and productivity could lead to a lack of trust with the employer and, as a consequence, workers suffer greater stress and increase psychosocial risks, in addition to the perception of an invasion of your privacy.

Another aspect to take into consideration is that, in order to protect the rights of employers and workers, it is important that the legislator update the laws regulating business control, taking into account the evolution and considerable advances in the technological field, for an effective defense of rights. in question. This aspect is vital, but at the same time it is complex to carry it out, since the law and the laws are outdated and outdated in the face of the great challenges of humanity. Consequently, the controversies that originate in the control by employers through technological means always in constant evolution pose a great legal and social challenge. They will continue their development with the inexcusable lack of adjustment to the new idiosyncrasies in the context with all the adaptations that would be necessary.

It is essential to regulate the relationship between business control and the right to privacy and intimacy of the worker, since the means of technological control can unleash an increasing risk in relation to the protection of the right to privacy of the worker. In recent years, it has once again become a central issue in labor relations, with special relevance in remote work and teleworking.

The confrontation between technology and the right to privacy, the central axis of most controversies, is continuous, and this question arises with increasing frequency with the persevering evolution of new technologies, artificial intelligence and robotics.

The objective of the legislator should be to achieve a balance between the employer's power of control through new technologies and the fundamental rights of the worker, in such a way that the means of control towards employees by the employer should never be understood as an intrusion into the private life of the worker, but as a means of control over the fulfillment of the labor obligation. It is at this same point where great resolution difficulties are encountered, given that the risk of a situation similar to "The big brother" or "Big brother" is getting closer and closer.

This type of problem is also reflected before the magistrates, because the control means store data and images, but the question that we could ask is which of the data collected can be used as evidence to justify a legitimate dismissal? With the direct effect that this supposes: If this information does not allow to be legally used as a means of proof, they will be prone to be stored to the detriment of the worker's privacy, with an illicit interference with their private life and impairing a fundamental right. In addition, the dismissal must necessarily be considered void for violation of a right with the respective consequence of the immediate reinstatement of the same and the payment of processing salaries (Molinera, 2018).

The power of corporate control and the fundamental rights of workers

In light of the aforementioned, the fundamental rights of workers must be taken into account, since they are very important and, especially, when we talk about dismissal and their validity must be established.

The rights that we are going to talk about in a more in-depth way are rights that correspond to workers not only directed to the employment relationship as such, but also as citizens, in particular reference is made to the right to privacy, to the secrecy of communication, respecting their dignity and the right to privacy.

In relation to this issue, a very old debate that was current in the 70s of the last century seems to re-green, in relation to the validity of fundamental rights in the workplace and in productive units. In those years “a maxim was coined that made a fortune, according to which the Constitution cannot stand at the door of the factories, but rather it must be guaranteed that workers retain their fundamental rights of citizenship in their entirety even if they are integrated into a business organization that, of course, it also has its demands for discipline and control” (López, 2018).

The legislator in the face of technological advances has not yet given an effective response, either because technologies have evolved very quickly or because the debate on this issue is becoming more difficult and complex every day. In our legal system there are no rules that regulate the use of email for purposes other than labor or corporate networks for union communications that continue to be regulated by the Workers' Statute according to the old bulletin board method.

Collective bargaining for its part has not kept pace with technological advances, although it has always been much more attentive to the conditions of workers and the defense of their fundamental rights.

Only the doctrine, at times, has tried to talk about this issue, especially about the “Reconciliation of the rights of workers with the business demands of organization of productive activities and control and surveillance of both the use of business means made available of the workers, as well as of the fulfillment of the instructions of the company” (López, 2018).

In relation to the employer, their rights are recognized and regulated in art. 38 of the Spanish Constitution, which recognizes the freedom of business and the market economy, but the powers derived from these recognitions must be exercised with respect for the dignity of the employees. Then the employer, in the case in which it provides computer means to the workers, can and must establish rules for the use of these means and on the other hand, must ensure that these rules are respected by the workers. The problem arises when the tools are used for personal purposes and

employer control goes beyond the employment relationship, because business control must always be objective, necessary and proportionate. Otherwise, the evidence stored by the control media that does not respect these principles will be evidence illegally obtained and void.

Conclusions

The future scenarios proposed by the organizations consulted foresee an increase in the impact of technologies on the employment of scientific and intellectual technicians and professionals, as well as directors and managers. On the contrary, the incidence will be reduced in accounting and administrative employees, qualified workers in the manufacturing and construction industries, operators of facilities, machinery and assemblers. Tasks related to digital technologies will increase, while more automated tasks such as administrative or manufacturing chains will be reduced.

Low-skilled and low-income jobs are the most exposed to globalization. The transformations that are taking place in the production process and the economy demand new policies for education, training and the provision of income. Policies are needed that allow the majority of the population to keep their jobs or take care of those that are born of the technological revolution; It is also necessary to assist them with dignity in the event of loss or lack of employment.

Globalization implies inclusion, therefore, it is important that government policies reduce the digital divide to avoid that a part of society is diminished by technological evolution. Labor law must accompany the peculiarities of this transformation, establishing the limits and principles that regulate, among other things, the border between labor relations and personal life.

The limitation of the time that the worker makes available to the employer is one of the challenges we face. The possibility of constant connection destroys personal and work boundaries, along with the inherent frustration of those who are not able to manage their time. It must be addressed from labor law or through the creation of institutions such as the right to disconnect or the right to rest.

The training of professionals with technical excellence is being the objective of European Universities. Universia España (2018) explains However, in Spain, there is a significant lack of experts in certain areas of information and communication technologies, and in STEM profiles, a problem that government, university and companies must work on overall, there is a recurring lack of professionals; and, in the future, there will be a lack of specializations that, to this day, we still don't even know what they are.

For this reason, government policies should tend to provide training in relation to new technologies, with a greater effort than has been carried out so far. Access to the labor market from the university is also the responsibility of the company, therefore, it is essential that the company-state binomial is guaranteed through legislative policies that contribute to the achievement of this association. We therefore understand that it is through social dialogue and negotiation that these labor reforms are sustained.

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Global Inclusion, Diversity, Belonging, Equity, and Access - GIDBEA.

The Architecture of A New Different

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Abstract

The article asserts the need for organizations to adopt intentional and transformative Global Inclusion, Diversity, Belonging, Equity, and Access (GIDBEA) practices, to ensure their future readiness. The research developed reaffirms the benefits of GIDBEA strategies in identifying gap areas and navigating crises, by providing insights on how to successfully embed a '*new different*' GIDBEA strategy into organizational frameworks.

By drawing trends across the 2020-2021 COVID-19 pandemic and other previous health and economic crises, it is indicated what is described as the "normality of disruption" and the need to move away from the idea of a 'new normal' to a *new different*. The *new different* acknowledges that the 'normal' or the status quo was often challenging for many. The impact and importance of the disruptions that individuals, communities, nations, etc., all have and will face together, is also recognized. The *new different* emphasizes organizational transformation through co-creation, sustainability, adaptivity, resilience, and design thinking. By implementing a design thinking model, GIDBEA proactively engages mistakes while promoting innovation through dissent and disruption. As a result, disruptions are not considered episodic crises but as recurring, expected, and presenting opportunities. Furthermore, it is argued that GIDBEA expertise is essential for remaining agile, innovative, and providing strategic organizational architecture to prepare and innovate for these disruptions. However, it is necessary to consider that GIDBEA practice can be limited due to the failure of organizations and leaders to frame it as an asset and develop strategic plans to leverage it in the same way they do other critical functional business units. Therefore, unless prioritized and conducted intentionally, GIDBEA work will not achieve its promised bonuses and transformative potential.

The article offers readers insights and tools to assess existing GIDBEA within their organization. Using metaphors of "construction" and "architecture," it illustrates how reimaging organizational architectures and constructing initiatives focused on GIDBEA are fundamental to resiliency, organizational sustainability, and the ability to thrive through shifting landscapes.

Keywords: Global; Inclusion; Diversity; Belonging; Equity; Access; New Different Architecture; organizational systems; organizational transformation; asset modeling.

Introduction

The recent COVID-19 pandemic, its variants, and related issues have created broad-reaching, intensive, global, and cross-sector disruptions. This most recent disruption, much like those before (2001, 2008, 2011), indicates the “normality of disruption” that must be navigated as part of future readiness. Disruptions have underscored the need for organizational and, in many cases, personal agility, nimbleness, innovation, and strategic approaches to managing these ongoing challenges. In other words, it is a question of readiness for multiple forms of future disruptions - the future of work, the future of AI, nanotechnologies, gig economies, machine learning, pandemics, and so much more. To prepare for our collective futures, organizations must *be* and *do* differently.

As illustrated by the 2020-21 pandemic, the HIV/AIDS pandemic in the 80s and 90s, the flu pandemic, real estate downturns, banking, climate crises, and so on, there continue to be deeply rooted social inequities and injustices globally. These include, but are not limited to, racism, sexism, xenophobia, ableism, religious intolerance, nationalism, classism, transphobia, cissexism, ageism, and heterosexism. These disparities and forms of oppression continue to spark the need for urgent global action. As one considers shifting global landscapes and demography, the rise of conflicting and new cultures, widespread and sustained social protests, local and global disruptions in the workplace, as well as the unprecedented hiring of Global Inclusion, Diversity, Belonging, Equity, and Access (GIDBEA)¹ officers, there are unique opportunities for institutions to leverage GIDBEA. To move from rhetoric to action, compliance to innovation, tactical to transformational, stagnant to nimble, and the status quo to the *new different*.²

Global Inclusion, Diversity, Belonging, Equity, and Access (GIDBEA) Officers and the Work

A recent *Forbes* article³ highlights how GIDBEA officers navigate crises, identify gap areas and build capacity for sustainable opportunities and innovations. GIDBEA officers' work has a deep emphasis on transformation, built on and grounded in civil rights

¹ Coleman, Lisa M. “Belonging & A New Different.” *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOpMxAMSSxlbw>

² Coleman, Lisa M. “Belonging & A New Different.” *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOpMxAMSSxlbw>

³ Umoh, Ruth. “How Diversity Heads Are Steering Their Companies through the COVID-19 Crisis.” *Forbes*, Forbes Magazine, 16 Apr. 2020, <http://www.forbes.com/sites/ruthumoh/2020/04/15/how-chief-diversity-officers-are-steering-their-companies-through-the-covid-19-crisis/#2c4124c465a9>

efforts across multiple intersecting global communities. Furthermore, the profound relevance of GIDBEA work is woven throughout the *United Nations 17 Sustainable Development Goals*⁴ and increasingly so with *World Economic Forum Environmental, Social and Governance (ESG)* reporting goals.⁵ Deep engagement of this work is necessary to navigate emerging shifts and address some of the most globally salient issues of our times, focusing on reimagining a world that can be different from today. Without GIDBEA, these innovations cannot be realized.

GIDBEA work, when done well, is not only reactive but proactive, action-oriented, and sustainable. Historic and globalized patterns of inequity are often associated with disturbing patterns of exclusion, intensified violence, and divisiveness during societal disruptions. Again and again, disparities related to mortality rates, the quality of life, mental health, and psychological and wellness issues for members of marginalized and vulnerable communities come to the forefront during so-called “crises and disruptions.” However, these disparities are deeply rooted in the ‘normal’, thus, making a *new different* focused on globally centered IDBEA systems, operations, and innovations essential.

While for some, there is newfound momentum and widespread urgency to address and redress inequality, racism, sexism, etc. For the most part, this work has always been central to GIDBEA officers and the discipline. Although many argue that it is time to reconsider foundational concepts of GIDBEA work, I say that much of the essential foci of the work has not dramatically shifted. The work to; shift power structures and related practices that oppress some and privilege others; learn from mistakes and create new opportunities; address and dismantle systems and patterns that support -isms, -phobias, and related exclusions across the globe; and reimagine and innovate new paradigms for new practices, new ways of being, and create new possibilities - *a new different* - has been and continues to be part of the commitment to the ongoing work for GIDBEA officers.⁶

To situate GIDBEA work within the paradigm of a *new different* shifts the notion that the field is bad to one that is emerging with unique challenges and opportunities. It recognizes that it has grown out of particular histories and continues to morph. It dismisses the notion that its contributors, apart from the ‘superstars’, are incompetent but rather that the leaders and participants are continuously learning throughout their journeys. In this way, it might be likened to the fields of IT and Marketing. GIDBEA work has consistently engaged in the dismantling of systems of oppression to create spaces for those outside of the mainstream to not only have a “place at the table,” but

⁴ “The 17 Goals | Sustainable Development.” *United Nations*, United Nations, Sept. 2015, <https://sdgs.un.org/goals>

⁵ “Over 50 Global Companies Adopt New ESG Reporting Metrics.” *World Economic Forum*, World Economic Forum, Sept. 2021, <https://www.weforum.org/our-impact/stakeholder-capitalism-50-companies-adopt-esg-reporting-metrics/>

⁶ Coleman, Lisa M. “Belonging & A New Different.” *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOpMxAMSSxlbw>

in many cases to create new tables and new spaces that reimagine the systems and boundaries of power. GIDBEA has also become more expansive. Although much of the work remains grounded in organizational transformation, equity, compliance, human rights, transformation, intersection⁷ work, redressing disparities, and other related research globally, it also intersects with artificial intelligence, gig economies, robotics, machine and people learning, and beyond. Now, this is not to argue that organizations and institutions have not historically tried to mute, silo, and marginalize GIDBEA work. Still, the people, the change agents, and the field will continue to evolve. There are the exceptions of a few bad apples, but that is no different than any other emerging field learning along the way. New terminology will continue to emerge, and old terminology will shift. There will be innovations in both practices and applications because, like good science, we learn from our mistakes. There will be greater segmentation in the market, which is already being realized, i.e., GIDBEA officers with a specific focus on medicine, law, government, etc. There are tiers across positions, SVPs, VPs, Directors, and the like, similar to other growth fields. To be clear GIDBEA work has evolved, and like other fields, its maturation comes distinction, clarifications, new best practices, and unanticipated yet-to-be-determined benefits.

Architecture and Construction as A Metaphor For Transformative Strategies and Action

By leveraging asset models, the strengths of GIDBEA, and the dynamics of international and intergenerational connections, organizations create structures or architectures for engagement. Race, like gender (as salient institutional examples), are social constructions. *Construction* here is understood as a metaphor and process that can help to illuminate the mechanisms by which these dynamic, plastic, and mutable ideas of race and gender, as examples, become robust architectural, structural, and institutional frames that pattern experiences and access to resources. De-constructing and pulling apart the architecture of organizational systems enable better understandings of how power becomes embedded within and mapped into/onto social and institutional structures, which profoundly shape the lived experiences and contexts within which people thrive and survive or not. To concretize these points, let us take the example of a wall. A wall is built by human labor and technology. There is a construction built on blueprints that bring the imagination into realization. At every step of this process, we must consider the existing power relationships, i.e., wall placement, load-bearing, etc. Within the labor system of construction, who was employed, and what technologies have were used? Walls direct and redirect movement through the built environment. Walls can block or shunt movement; they can be made porous or not, restructured, or torn down for more access—walls matter.

⁷ Crenshaw, Kimberlé W., "On Intersectionality: Essential Writings" (2017), *Books*, 255, <https://scholarship.law.columbia.edu/books/255>

Within buildings, an architectural landscape is distinct, even if the materials were sourced globally. As we build, there must be an intersectional approach to infrastructure to ensure it works. This focus on the architecture and construction necessarily entails a focus on the power relations between different components of the building. One of the initial steps would be to consider different power aspects. Are there suitable beams and supports in place? The builder, the architect, the construction company, etc., would not want something to collapse; remember, the two-by-fours are just as important as the wood situated in between critical joints - only inches in length, but vital to it all. And, of course, it all has to fit together to work. Interstitial spaces forecast the dynamic needs that will emerge in the use of the building. Before letting any individual go into the building, there would be audits, inspections, tests, coupled with failures, mistakes, and fixes → contestation, disagreements with contractors (anyone ever built or renovated a house?). Then, more strategic design, innovation considering data, metrics from all of the research, learning from mistakes along the way, and holding people across all levels accountable. Of course, ideally, the exterior would also be appealing and inviting to passersby. As one enters the building, there are ramps (of course, we now know these are essential) because this is the new millennium. Next is the interior. The design would consider lights, feeling, temperature, and mood. Here, various and diverse materials are often put together to ensure that there is sustainable and enduring support of the building. There would be attention to the walls, the placements, and equitable access to the building and how welcoming the exterior and interior may be. (*What about the exterior and interior designs of organizations?*) This type of architecture centers thinking differently, reimagining the institutional blueprints related to the status quo, and preparing for inevitable disruptions. The framing emphasizes attention to organizational structure, intentionality and co-created design, iterative learning, and follow-ups that engage contestation and mistakes within continuous learning cycles leading to increased innovation, growth, action, and accountability for a *new different*.⁸

Gidbea Analytics -- The “Blueprints” That Inform Institutions and Leaders

Analyzing our institutional patterns - our “blueprints” - is essential to assessing what exists and the related distributions of power within organizational structures and architectures to begin the process of reimagination and creating a *new different*. Identifying gap areas, patterns of exclusion, and mapping the status quo - particularly the dominant social and intellectual genealogies that inform the institutional milieu - is fundamentally critical. Below are definitions and examples of assessment and auditing templates for organizations and leaders (see Appendix). These templates provide guiding questions to assess the GIDBEA organizational architecture.

⁸ Coleman, Lisa M. “Belonging & A New Different.” *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOpMxAMSSxlbw>

Definitions Revisited

Global Diversity, Equity, Inclusion, Access, and Belonging are all parts of the same pie. Many are familiar with Verna Myers, and her TED Talk.⁹ Part of what Myers emphasizes in the TED Talk is that "Diversity is being invited to the party. Inclusion is being asked to dance."¹⁰ I like to draw on Myers's dance metaphor with this example: I went to "single-sex" schools based on the gender binary of "girls" and "boys," and for those of you who did not go to single-sex schools, there are things called "mixers." What happens is that the schools bring students together in a room (it was a horrible little thing) to dance. In my experience, students aggregated along identities (including gender) and affinity of interests. For example, the boys would stand on one side, and the girls on the other, and gender non-conforming in another. To make matters worse, there were divisions within groups such as the geek/nerd girls (lovingly written), the athletic girls, the artistic girls, and so on. There was diversity of representation in the room, but nobody was talking, let alone dancing with one another. At this point, Myers argues that *inclusion* would only occur if the students began to engage, talk, and dance together across silos.

Building on Verna Myers' work, it is essential to emphasize the role of *equity* in realizing our GIDBEA goals. Continuing the dance metaphor, let's say only salsa music has been played for the last ten formal school dances. The organizing group, who picks the DJ, really likes salsa. After several years, another group challenges the organizing group and requests reggae and pop music. In an equity model, there would be a recognition of historical inequities and adjustments would be made for more musical representation. Further building on the idea of belonging,¹¹ debate and dissension would be brought in for co-creation and different musical and DJ selections approaches. Additionally, an intentional strategy of difference would center inclusive design to enhance access in curating all facets of the "mixer." For example, no strobe lighting that could induce seizures would. When setting up the sound system equipment, the placement of speakers would allow for the reverberation of beats to be felt vs. the sole reliance on audible sound. There would be a sliding scale regarding cost and attention to differentials in terms of "dress codes." In these examples, historical patterns are recognized, and the design focuses on inclusion, equity, belonging, and access, utilizing co-constructed strategies and innovations that are sustainable and based on strength-based modeling.

⁹ Myers, Vernā, director. *How to Overcome Our Biases? Walk Boldly toward Them*, TED, Nov. 2014, https://www.ted.com/talks/verna_myers_how_to_overcome_our_biases_walk_boldly_toward_them

¹⁰ Myers, Vernā. "About Vernā Myers." *The Vernā Myers Company*, The Vernā Myers Company, <https://learning.vernamyers.com/pages/about-vern-myers>

¹¹ Coleman, Lisa M. "Belonging & A New Different." *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOpMxAMSSxlbw>

Strength and advantage-based asset models are essential to GIDBEA institutional excellence. Recent scholarship by Scott Page, and others, argue for leveraging diversity (of thought, background, etc.) and inclusion instead of letting assets languish.¹² Some organizational approaches, as have been well documented, focus primarily on recruitment with the expectation that people being together in organizational spaces would allow diverse engagements to happen magically. It is important to note that this is not how organizations address marketing or information technology (IT) function areas. There is an orientation or process that is often intentional and attentive to intersections of portfolios, needed networks, and partnership collaborations. Similarly, GIDBEA work must be deliberate and embedded within the organization's architecture. There must be a reorientation that entails moving away from deficit to asset modeling by leveraging the diverse and innovative possibilities that the combination of diversity of identity, thought, nation, and background creates. There is a tendency to label anything that differs from what is deemed "normal" or the status quo as deficient without attention to the benefits of intersectional collaborations and debate that comes out of difference. It is often the failure of our organizations and leaders where there is not any reframing of GIDBEA as an asset and related to transformational possibility, and as a result, organizations do not develop strategic plans to leverage them in the same way they do other crucial innovations, functions, research, pedagogy, etc. areas.¹³ These limitations of GIDBEA leadership and process are often the result of organizational deficit framing, which misses the opportunities to leverage mistakes and/or conflict that emerge from inclusive and generative processes.¹⁴

Organizations that do not leverage disruption, the emerging, and the diverse as opportunities often do not thrive - no organization wants to be Blockbuster, Altavista, or Netscape (and for those reading the article who do not know these companies, that is the point). Organizations that pivot and engage the *new different*, often thrive and become more sustainable. One example of leveraging GIDBEA architectures is the Nike "*Dream Crazier #justdoit*" campaign.¹⁵ Nike addressed the stereotypes of girls and women in athletics. They leveraged the "problem" and reframed it as an opportunity by developing an ad campaign that focused on women and girls. They used this idea of community and belonging (the very contestation over girls and athletics) to strengthen and embed a *new different* way of thinking, which increased their growth and market

¹² Page, Scott E. *The Diversity Bonus: How Great Teams Pay off in the Knowledge Economy*. Princeton University Press, 2019. *Diversity of thought is central to these bonuses, and diversity of thought is connected to diversity of background, education, culture, etc.*

¹³ Lamson, Melissa. "Transformation and Reconciliation in South Africa." *Diversity Journal*, Profiles in Diversity Journal, 10 June 2013, <https://diversityjournal.com/10795-transformation-and-reconciliation-in-south-africa/> *Transformation (South African context) focuses on power; power systems that created inequities that are embedded in all aspects of a society.*

¹⁴ Coleman, Lisa M. "Belonging & A New Different." *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOpMxAMSSxlbw>

¹⁵ "Dream Crazier." *Nike News*, Nike, 24 Feb. 2019, https://news.nike.com/featured_video/dream-crazier

opportunities. They created an architecture that defined their differences as not only a strength but as an elemental asset. At NYU's Office of Global Inclusion (OGI), we are attempting to do the same. By accelerating and leveraging global diversity to create an even more inclusive, innovative, and sustainable organization. Contestation is being embraced, not obliterated, resulting in escalated strategies of inclusion¹⁶ that leverage differences across the GIDBEA landscape.

Being@NYU and NYU BeTogether: A Blueprint to Strategize for GIDBEA

To conclude, I offer an example of how NYU embraced dissension to develop new strategies related to GIDBEA practices, policies, and processes. Note - this is an ongoing constant PROCESS - because GIDBEA work is not a static metric to which we organizationally arrive. It is a dynamic process of work that is ever-evolving. The best GIDBEA innovations emerge when multigenerational, multifaceted, and multi-sectored communities imagine and collaborate to address emerging and shifting landscapes.

In 2017, NYU launched a climate assessment in response to community concerns regarding varied experiences at the university. In the following months, 21,699 students, staff, administrators, and faculty (31.1% of the entire school's population) joined the dialogue. Through these responses, OGI was able to identify where NYU was as an organization and begin mapping out where it would like to be. The Being@NYU assessment identified areas of success as well as challenges. It concretized information about the areas of improvement needed and vitalized data relevant to the experiences of NYU students, faculty, and staff. As a result, as an institution, we were able to hone in on the areas for growth that provide the strategic compass for our ongoing GIDBEA initiatives across the global network. While the initial data collection undertaking was far from perfect, a lot was learned. There are ongoing data collection efforts to augment, gain new insights, etc., for current and future work.

Following these efforts, I created a new initiative focusing on incubation, innovation, and new architectures of possibilities - NYU BeTogether.¹⁷ This initiative is actively creating the building blocks to realize the *new different* and related GIDBEA goals by leveraging the data (taking it off the shelf and focusing on the action), engaging in processes of co-creation by focusing on opportunities, through accelerated transdisciplinary incubation, collaboration, innovation¹⁸, and systemizing architectural efforts. This initiative forges connections between and among constituents (alumnae included) from across all of NYU's global campuses, sites, and external partners to

¹⁶ Coleman, Lisa M. "Belonging & A New Different." *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOpmXAMSSxlbw>

¹⁷ NYU. "What Is BeTogether?" NYU, New York University, Office of Global Inclusion Diversity and Strategic Innovation, <https://www.nyu.edu/life/global-inclusion-and-diversity/centers-and-communities/nyu-be-together/what-is-betogogether.html>

¹⁸ NYU. "What Is BeTogether?" NYU, New York University, Office of Global Inclusion Diversity and Strategic Innovation, <https://www.nyu.edu/life/global-inclusion-and-diversity/centers-and-communities/nyu-be-together/what-is-betogogether.html>

co-create, innovate, and escalate existing programs to create *new different* initiatives. BeTogether reimagines and builds infrastructures, and reframes *difference* to generate new pedagogical resources, programs, incubators, theatre productions, hackathons, solvathons, business leadership and managerial strategies, accountability structures, and more. GIDBEA modeling is consistently disseminated across the organization, including accountability metrics to get and utilize needed architectural/organizational data that build in debate, divergent ideas and leverage the bonuses of difference, and mistakes through an iterative learning cycle. The goodish vs. the perfect is embraced¹⁹ across the building processes. Contestation is folded into the talent development, leadership and innovation processes, and organizational structures to shift GIDBEA from HR and departmental silos to operational systems, boards, and the C-Suite. This shift entails moving from the reactive to the proactive and generative, and from focusing on crisis management to organizational readiness that emphasizes innovation, transformation, possibility, and resiliency. Readiness underscores the need to not only be prepared for the technological evolutions, and future disruptions, but also new ways of doing and being²⁰ that builds on difference within and across organizations. As the ages of knowledge, collaboration, and imagination have emerged²¹, to continue to thrive, organizations and their architectures must harness intrapreneurial efforts and the innovations that emerge across the intersections of the diversity of people and thought.

In this instance, the *new different* underscores the architecture of GIDBEA scaffolding by intentionally focusing on engaging the global disruptions, debates, etc., that we all have and will continue to face together. To construct sustainable organizations, the “architectural” strategies of GIDBEA must not only be embedded and interlinked throughout its various components to leverage global diversity, but also to root out exclusionary power dynamics, and create more inclusive, innovative, organizations for our collectively integrated futures that are future-ready, sustainable, and thriving.

Appendix

Organizational Assessment Template

Document Purpose: This template serves as a self-assessment tool to support organizations and leaders (e.g., whole organizations, smaller teams, schools, departments, units, etc.) in reflecting on their climate and leadership practice relative

¹⁹ Chugh, Dolly. *Person You Mean to Be: How Good People Fight Bias*. Harper Business, 2018.

²⁰ Coleman, Lisa M. “Belonging & A New Different.” *LinkedIn*, LinkedIn, 14 July 2021, <https://www.linkedin.com/pulse/belonging-new-different-lisa-m-coleman-ph-d-she-hers-/?trackingId=%2FgeSYDTETMOPMxAMSSxlbw>

²¹ Hansen, Drew. “Imagination: What You Need to Thrive in the Future Economy.” *Forbes*, Forbes Magazine, 12 Aug. 2012, <https://www.forbes.com/sites/drewhansen/2012/08/06/imagination-future-economy/?sh=4163bce056dc>

to GIDBEA, drawing from Deloitte's *Six Signature Traits of Inclusive leadership*. Such a reflection tool can support you in the process of identifying follow-up actions, aligned resources, and strategies for developing more inclusive organizational practices.

Organizational Climate - Considerations

- Mission - How does your organization define and integrate/embed global inclusion, diversity, belonging, equity, and access (GIDBEA) in relation to its mission?
- How are GIDBEA values/beliefs underscored?
- Who are your peer institutions and how do you rank in comparison/contrast (GIDBEA focus)?
- How are the diverse faculty and staff positively or negatively affected by our culture, system, and practices?
- How does department or unit support, benefit, or impede our GIDBEA values?
- How open and committed (with fidelity) to diversity toolkits, trainings, etc., is the organizational culture? What has been instituted in the last two years? Four years?
- How has the department engaged guidelines relating to GIDBEA recruitment?
- What informal and/or formal measures are in place to measure the effectiveness of GIDBEA initiatives? How will we build in periodic check-ins to see how it's going (i.e., progress monitoring)?
- How do we assess the impact of efforts and remaining gaps? What about the sustainability of impact and efforts? Is the work embedded into practices?
- How does an individual report bias, racism, sexism, or other forms of discrimination? How are reports addressed? What are the formal or informal processes? What is the feedback loop?
- What is your reputation in GIDBEA? Internally? Externally? What are communication plans around GIDBEA priorities, expectations, and strategy?
- Given demographic shifts, what has been instituted to think about your work (teaching, research, etc.) differently and/or adaptively?

Climate Assessment: *On a scale of 1-5, where would you place your department, unit area, on the 6cs of Inclusive Leadership (Organizational) Commitment, Courage, Cognizance of Bias, Curiosity, Cultural Intelligence, Collaboration?*

Leadership Assessment Template

Leadership - Considerations

- How does leadership link GIDBEA to your mission, leadership goals, and practice? What strategies have already been effective? What has not worked?
- How does the leader provide feedback, and in what form? How does the leader receive feedback, and in what form?
- What are the most pressing needs in terms of GIDBEA efforts? What has been addressed and why? What is still in process? What is still unaddressed? Why do they remain?
- How does leadership engage values and encourage GIDBEA practices or not? Can you quickly identify concrete examples and action steps? What are they?
- How does the leadership ensure that they are tying the mission back to GIDBEA principles? How does this reflect in one's leadership practice?
- How does leadership tap others, collaborate, and hold others accountable?
- How does leadership address bias, racism, sexism, or other forms of discrimination when reported? In what formal or informal processes do leaders engage? What is the feedback loop?

Leadership Assessment: *On a scale of 1-5, where would you place your department, unit area, on the 6cs of Inclusive Leadership (Organizational) Commitment, Courage, Cognizance of Bias, Curiosity, Cultural Intelligence, Collaboration?*

Belonging: Quick Pulse Assessment

Reflection Questions for Leaders and Organizations

- How does your organization handle dissension and conflict - overall and at various levels?
- How are new ideas that do not fit into the "status quo" leveraged, or not, across the organization?
- What are organizational leaders' leadership capacity, managerial adaptability, and resilience?
- Is the information clearly disseminated across the organization or not? How are employees given feedback about how contributions are valued or not? Who receives the feedback, and who might not?
- What organizational cultural norms (fit) are open and transparent? Which norms and expectations are more subtle? How are these norms and expectations communicated or not, and to whom?

- How are problems handled and assets leveraged?
- What is the “mistake culture” and learning stance of the organization? In other words, how are mistakes treated when they are non-catastrophic? How do leaders, managers, and peers respond?
- What structures are in place to harness learning and intrapreneurship (i.e., internal entrepreneurship)?
- Organizational & Leadership Self-Rating Scale
- Growth Mindset vs. Fixed Mindset (Dweck, 2008)
- Learning and Development Stance vs. Quiescent
- Future Ready (i.e., succession planning, trans-generational co-learning opportunities, etc) vs. Leadership Gaps
- Nimble/Agile vs. Stagnate
- Asset Model vs. Deficit Approach
- Attuned to Innovation vs Status Quo
- Collaborative vs. Siloed

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Regional management of the Bay of Bengal water area.

The challenges of maritime security

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Abstract

The Bay of Bengal is the largest bay in the world that forms the northeastern part of the Indian Ocean, bordered mostly by the Eastern Coast of India, southern coast of Bangladesh and Sri Lanka to the west and Myanmar and the Andaman and Nicobar Islands (part of India) to the east. The regional management of the Bay of Bengal water area is performed by regional organisations such as ASEAN, SAARC, BIMSTEC and IORA unifying Bay's coastal states. Nevertheless, differences in political and economic interests of the states, separate conflicts between states and consequences of the pandemic not only challenged the integrity of the regional management but also led to rising insecurity of the Bay of Bengal and fears to navigate in that area. In this article, the authors, in a more detailed way, will disclose existing regional management systems, concerns related to maritime security and give recommendations on how to increase efficiency in collective management of maritime security issues and how the concept of due diligence may play the vital role in the regulation of not only maritime security aspects but also aspects of environmental protection and potential transition to the blue economy.

Keywords: Bay of Bengal; maritime security; regional cooperation; due diligence.

Introduction

Today, the Bay of Bengal countries account for a population of almost 1.78 billion, while adjacent states with interest account for an additional 490 million. The core states have a combined GDP of \$7.5 trillion, with interest-bearing states adding another \$811 billion. More robust governance is required to solve maritime security challenges in the Bay of Bengal in today's heightened geopolitical and epidemiological circumstances in the region and around the world (BoB). Nevertheless, economic proficiency is not the only concern of international governance. The important challenge that the regional interstates organizations in the Bay of Bengal water area face is maritime security. Maritime security is a general term that refers to the internal and external security of navigation. Piracy, illicit trade, and maritime mixed migration pose threats to navigation in the Bay of Bengal (Benson, 2020).

Geopolitically, the littoral countries of BoB face tensions and crises that have been unsolved for many years, like political unjust situation between India and Pakistan, the Rohingya crisis of between Bangladesh and Myanmar, etc. These geopolitical tensions impact mutual trust, respect and equitable sharing of benefits among regional states. (Rahman, 2017). Regional cooperation between these littoral countries to manage maritime security has many advantages likely to manage oceanic affairs and participation of regional countries in the negotiation tables etc. (Rahman, 2017). On the other hand, there is no binding reporting and monitoring system among the littoral states (Rahman, 2017). However, regional ocean governance lacks common strategic priorities since the strategic priorities of the coastal states vary based on their national priorities, depending on their national political aspects. Therefore, littoral countries are not equally following proper stepping for protecting the marine environment, likely marine pollution, illegal fishing etc. (Sakhuja, 2014). Sharing of information about aquatic resources, experiences and practices of Blue Economy requires a common strategy requiring better collaboration (Rahman, 2017). Such information sharing has also been recommended in the working session with high importance in the third IORA (Indian Ocean Rim Association) ministerial Blue Economy conference (IORA, 2019).

Proper utilization of an ocean-based economy encompasses sustainable usages of marine resources. The concept of the blue economy (BE) was promoted at the Rio Summit in 2012 (Rahman, 2017). The blue economy encompasses many activities that impact livelihoods and jobs of human beings, and activities established based on the exploitation of aquatic resources (World Bank, 2017). The World Bank stated to preserve the health of marine and coastal ecosystems while using the aquatic resources. Furthermore, BE governance has been substantial for the littoral and non-littoral states in matters of preserving a healthy coastal ecosystem (Attri and Muller, 2018).

The blue model of BoB is unlikely to deliver a truly balanced integrated model for the littoral and non-littoral states unless agreeing upon a common and convenient definition of cooperation that can facilitate reasonable utilization of marine resources of respected countries. (Singh, 2020). The sustainable practices of the BoB region need special attention keeping the geopolitical tensions of littoral states in mind. The 4th ministerial summit in 2018 in Kathmandu (BIMSTEC summit, 2018) discussed the healthy usages of the marine resources, and the monitoring of such activities related to exploitation of ocean resources are agreed to be enhanced further. The initiative of motoring remains in the institutional capacity of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation BIMSTEC (agreement no. 9 of institutional reform in the Fourth BIMSTEC Summit Declaration at Kathmandu).

Blue growth of BoB needs a monitoring context to secure the holistic manner to ensure regional cooperation (Rahman, 2017), which has long been discussed for implementation. In fact, India is planning to get a separate new ministry to deal with BE (Singh, 2020),

which is a holistic approach for India to way forward for fair usage of aquatic resources. However, the Blue movement needs from all littoral states of BoB to ensure sustainable practices among BoB governance.

Therefore, the article evaluated how the Bay of Bengal coastal states deal with maritime security issues and how they do that within the agenda of the regional organisations. The operation of regional organizations was examined with special attention paid to the due diligence concept, which imposes an obligation on states to maintain safety within or outside their respective borders in order to prevent detrimental occurrences. And we concluded with the recommendations to regional cooperation in the Bay of Bengal on how to make maritime security regulation more effective and which role due diligence can have in Bay of Bengal regional management?

Maritime security regime & cooperation

The BoB governments are aware of maritime security agendas. Increasing oil and gas demands, economic resilience, increased connectivity for trades and supply are the pushed factors for boosting maritime cooperation between littoral and non-littoral states. Maritime security has been a top priority for states with significant economic and political clout. (Jack and William, 2010) (Bueger and Edmunds, 2017).

The concept of maritime security is a distinct subcategory of the law of the sea that incorporated mainstream security issues, domains and activities to develop multisectoral cooperation on common ground to secure transnational organised crime or environmental degradation (Bueger and Edmunds, 2017). Maritime security accentuates how crucial international collaboration is in expanding the notion of security among coastal states and states interested in exploring and exploiting water areas.

Indeed, cooperation is needed to protect the security of the Bay of Bengal. Maritime security management has been a potential prospectus fact for increasing blue economy and strategic significance (Gamage, 2017). International organisations assisting the implementation of maritime security management of BoB are:

- *BIMSTEC*

This sub-regional organization BIMSTEC was established in 1997 after Bangkok Declaration. The acronym BIMST (Bangladesh, India, Myanmar, Sri Lanka and Thailand, EC economic cooperation) ended up with the Bay of Bengal Initiative for Multisectoral Technical and Economic Cooperation in February 2004. There are many sub-sectors BIMSTEC works for by facilitating cooperation between its member states. The permanent secretariat was established in Dhaka, 2014. There are sectoral committees coordinate, monitor and review progress by meeting, organizing summits to reconnect private/public and regional/international concerned bodies.

- SAARC

The secretariat of SAARC was established in Kathmandu in 1987. SAARC has an arbitration council in Pakistan. The fair and efficient settlement of issues and other relevant disputes within the region might be referred to the arbitration council. There are currently nine observers of SAARC along with Australia, China, EU, Iran, Japan, Korea, Mauritius, Myanmar and the USA. Maritime cooperation is one of the many priority areas of SAARC. Many successful agreements have been conducted under this framework. Though maritime issues were ignored to some extent, e.g. mitigating environmental and human development concerns of the Bay of Bengal (Iyer, 2017) because of the imbalance of power between littoral countries and their connectivity and integration (Benson, 2020). The 18th SAARC summit in Nepal recognized the potentials of a blue economy in the region. Bangladesh seems to be the country recognized vision of BoB Partnership for Blue Economy and pushed forward to ensure sustainable development and management among littoral states (Rahman, 2017). Some of the monitoring desks regarding SAARC criminal matters have been blocked by Islamabad due to the political relationship between India and Pakistan (Bhaumik, 2018).

- IORA

Priority areas are maritime safety and security, fisheries management, disaster risk management, trade and investment facilitation etc. Recently Bangladesh hosted a high-level conference in Dhaka on IORA Blue Economy in September 2019. Enabling global connectivity requires acknowledging the criticality of the maritime infrastructure was discussed in the 6th Indian Ocean Dialogue, 2019 event in Delhi. Indo-Pacific maritime issues require cooperation along with common understanding is the main dialogue of the IORA. (The Delhi Consensus, 2019) India, Sri Lanka, Bangladesh, Thailand are the members of both BIMSTEC and IORA. IORA Council of Ministers, senior officials' committee, and Troika are the governance bodies. High-level meetings, conferences and working group reports are maintained in the IORA strategic planning on ocean management, sustainability and security.

- ASEAN

The Association of Southeast Asian Nations (ASEAN) was founded on August 8, 1967, when the foreign ministers of five countries signed the ASEAN Declaration: Indonesia, Malaysia, the Philippines, Singapore, and Thailand. From the foundation, one of the priority areas of the ASEAN was maritime security. The ASEAN recognizes the multifaceted nature of marine issues and pledges to handle them in a holistic, integrated, and complete manner. More specifically, ASEAN prioritises combatting sea piracy as a form of transnational crime linked to other forms of transnational crime, such as terrorism, illicit drug trafficking, illicit trafficking of wildlife and timber, trafficking in persons, and people

smuggling (ASEAN, 2018). Through the strengthening of ASEAN-led mechanisms and the adoption of internationally accepted maritime conventions and principles of maritime cooperation and maritime security, a resilient community in a peaceful, secure, and stable region has been built, with enhanced capacity to respond effectively and quickly to challenges in the field of maritime security (ASEAN, 2018). One of such mechanisms is the ASEAN Security Community (ASC) (nowadays ASEAN Political-Security Community) was initiated by Indonesia and adopted as part of the Bali Concord II in October 2003 and can be defined as the system of regular meetings resulting in issuing strategic documents. More specifically, maritime security issues are discussed at ASEAN Defense Ministers Meetings-Plus. So, within the agenda of the mentioned international organization, maritime security is a regular topic (ASEAN, 2018).

Importance of the BoB region and its opportunities and challenges

BoB serves the dynamics of the macroeconomic growth engine of the region. The third IORA conference in BE in Dhaka was the platform to discuss the opportunities of utilizing marine resources for the macroeconomic growth of littoral and non-littoral states. This "Dhaka Declaration on BE" serves as a way forward to the blue model of economy. This declaration opportune member states for reaping economic benefits by including features of oyster culture, marine flora and maricultural (IORA, 2019). BE growth of the BoB region significantly influences the increasing GDP of littoral and non-littoral states (Karim, 2021). The trade shares of SAARC countries are 5% of global trade from Blue Economy of BoB, which is 25% among ASEAN countries, EU & North America boast 40-50% from BoB (Karim, 2021). Subsequently, the BoB zone is not only boosting the economy in the region but also influences boosting the economy of the EU, North America and Asia. Economically healthy countries are utilizing the benefits of BoB than the littoral countries. Many economic activities are encompassed in the domestic strategic priorities of BoB states, likely shipping, energy productions, tourism, fisheries, maritime trade etc. The littoral states need to rediscover the importance of the BoB for better livelihoods by utilizing BE of the BoB zone. The GDP growth rate of Bangladesh, Myanmar and India is faster than Nepal, Sir Lanka, Bhutan and Thailand (Chaudhary, 2021).

The most challenging part of the BE of the zone in the weaker domestic economy of some of the countries make obstacles for equal participation and utilizing economic benefits. (Singh, 2020: Rahman, 2017: Chaudhary, 2021). Corruptions, rigid national policies, and lack of information flow among the countries are the most challenging part. Lack of information on marine resources needs a knowledge sharing scope between countries. Many countries lack control over the legal and environmentally friendly utilisation processes, creating an unhealthy ecosystem and polluted BoB. Research

and development funds are not available, which hinders the rediscovering of the BoB zone and its economic and ecological value of fueling domestic trade and global trade opportunities. (Karim, 2021). Though consistent targets and interest for a Sustainable Blue Economy were recommended in the IORA 2019 conference. The 4th BIMSTEC summit emphasized the necessity for generating an Inter-governmental Expert Group who can make an action plan on the blue economy is the hope for the future development of the marine ecosystem of the BoB.

Role of International Organizations: Challenges and opportunities

Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC) plays a reading role in promoting cooperation among their member countries: Bangladesh, Nepal, Bhutan, India, Shri Lanka, and Myanmar and Thailand. Issues such as piracy, overfishing, climate, and geographical positions of some countries disrupt and hinder satisfactory results of the cooperation among states (BIMSTEC). The governments of the Bay of Bengal states have been trying to solve mentioned problems by ratifying and signing many international maritime treaties that fail to manage the potential conflict to many extents (BIMSTEC). The socio-economic imbalance between the states hinders the capacities of the states to protect their national marine security, capacity to build climate resilience and economic growth. For example, the UN Food and Agriculture Organization's Bay of Bengal Large Marine Ecosystem (BOBLME) project, which ran from 2009 to 2017, encouraged capacity development by integrating knowledge through need assessments. (BOBLME, 2016) (Benson, 2020). However, the project lacked coherency in facilitating leadership driving initiatives. Modelling ecosystem management was challenging for the project, and the project summarized a need for an effective and sustainable management system across the region (BOBLEM, 2016).

BIMSTEC enhanced regional cooperation and created a platform for securing the Bay of Bengal. Nevertheless, within the cooperation, there are still challenges to improving safety procedures. Member nations and their internal interests posed challenges. Nepal and Bhutan are landlocked countries with a vested interest in the Bay of Bengal's maritime stability (Benson, 2020). The second BIMSTEC emergency management exercise was carried out in February 2020: 80 delegates from Bangladesh, India, Myanmar, Sri Lanka and Nepal, along with 35 Indian State representatives, followed the exercises. Emergency prevention and management in the Bay under BIMSTEC has been controlled effectively through strong financial commitment, which is hard to get from the respective countries (Bose, 2020) due to the absence of consolidated funds to run the further projects aimed at security control (Godbole, 2018) (Xavier, 2018). Resource commitment is one of the main policy priorities to secure maritime issues that some economically solvent countries are not ready to provide, and others lack limited

economic solvencies towards regional developmental instruments (Gamage, 2017). Another priority area of planning is improving the maritime surveillance capacity of ports and navigating states. Gathering information about maritime accidents and maritime welfare objectives requires developing surveillance systems. Lack of capacities and control over corruption hinder the inspections of cargo by respective authorities. 90 % of world cargo is transported through the Indian ocean, and only 2% of physical inspection activities conducted by the authorities cause illicit activities (Alam, n/d). Networks and friendly relationships between sovereign states and authorities need access to all sources of information and missions at sea that possible to integrate and improve existing surveillance systems. Regarding the mentioned promotion of technologies as a component of constructing friendship between states, Article 268 of UNCLOS defined that states, directly or through competent international organisations, shall promote: the acquisition, evaluation and dissemination of marine technological knowledge and facilitate access to such information and data, the development of appropriate marine technology, the development of the necessary technological infrastructure to facilitate the transfer of marine technology (UNCLOS, 1982). We would like to note that cooperation in maritime security through information and technology exchange is acceptable and highly recommended by international law.

The rule of law on this maritime zone challenges to enable integrity campaigns between littoral states. Nevertheless, the uniformity of criminal law, commercial law, and public international law is essential to protect judicial integrity. And nowadays, there are crucial infrastructural differences between different BoB port areas that take place, mainly due to differences in corruption rates and the rule of law acceptance. In response to such challenges, India has taken the initiative by creating the Maritime Anti-Corruption Network (MACN), where over 100 private companies work together to tackle maritime security (BIMSTEC).

Managing Complexity of BoB governments

The core governments of the BoB that are part of BIMSTEC require initiatives to produce a coherent approach to secure the BoB zone. As all of the core governments are not part of IORA, SAARC and ASEAN, this created a necessity to develop a diverse level of coordination in maritime security governance for some member states. It also brings a heterogeneous set of actors in coordination management that might create complexity in maritime governance.

So, the BoB governments need to build capacities and standardize domestic maritime security welfare policies since ocean governance, economic resilience, and security level at sea vary between states (see table 1, 2 & 3).

Littoral Countries	Piracy and armed robbery (scores in average)	Illicit trades resilience (scores in average)	Maritime Mixed migration (scores in average)	Security at sea (scores in average)
Bangladesh	19	65	47	44
India	24	48	64	45
Myanmar	44	53	37	45
Sri Lanka	84	61	55	67
Thailand	78	57	53	63

Table 1: Security at the Sea (Digits indicate navigation safety in waters: ascending from dangerous to safe (0 to 100))¹

Littoral Countries	Coastal welfare (scores in average)	Blue Economy (scores in average)	Fisheries (scores in average)	Economic resilience (scores in average)
Bangladesh	50	36	53	46
India	44	62	56	54
Myanmar	51	49	32	44
Sri Lanka	62	53	50	55
Thailand	51	72	65	63

Table 2: Economic Resilience (Digits indicate navigation safety in waters: ascending from dangerous to safe (0 to 100))²

Littoral Countries	International Cooperation (scores in average)	Rule of Law (scores in average)	Maritime Enforcement (scores in average)	Good Governance (scores in average)
Bangladesh	88	40	69	66
India	88	62	74	75
Myanmar	94	49	60	68
Sri Lanka	100	61	63	75
Thailand	88	55	69	71

Table 3: Good governance (Digits indicate navigation safety in waters: ascending from dangerous to safe (0 to 100))³

Bangladesh: Rohingya refugee situation creates instability in Bangladesh's law and enforcement. Bangladesh is under a threat of piracy and armed robbery compared to other BoB states diminishing the safety of navigation in their territorial waters.

¹ Data: Maritime security index, 2019

² Data: Maritime Security Index, 2019

³ Data: Maritime security Index, 2019

Kidnapping fishermen for ransom created fear in fisheries communities and impacted the economic resilience of the families. However, overall fishery and blue economy management have been improved significantly, though coastal welfare still needs improvements. As a result, the blue economy became a significant priority and changed the overall ocean governance in Bangladesh. Affiliation to IORA also increased the level of international cooperation and subsequently increased the integrity of Bangladesh's Marine enforcement.

India: India has taken enormous initiatives at all levels, international, national, regional, sub-regional and bilateral, which has provided India's government with a leadership position in protecting maritime security. India has invested resources in several different sea projects to boost the maritime-related affairs of the country.

Myanmar: Myanmar has developed maritime security along with economic resilience significantly in recent years. Myanmar has reformed its internal politics by supporting non-littoral and western countries, which has given economic and geopolitical resilience to Myanmar by strengthening its naval capabilities (Gamage, 2021). At the same time, the political, economic and social crisis in Myanmar led to weakening of offence prevention in navigation and subsequently to a sharp increase in illicit trades cases. Increased commerce in guns, narcotics, and synthetic drugs constituted a serious maritime concern for Myanmar (Benson, 2020). The country is now the world's biggest producer of the highly addictive and widely used synthetic substance yaba. Myanmar has attempted to stop the flow of illegal substances out of the country, but criminals continue to do so across Southeast Asia. As a result, the rate of navigation safety in the category of illicit trades resilience has declined drastically since 2019. (Benson, 2020).

Sri Lanka: Sri Lanka has been increasing multisectoral cooperation for strengthening maritime-related affairs, especially focusing on policies after the fisheries dispute 2016 with India. (Gamage, 2021). At the same time, due to high rates of illicit trade induced by the trade in gold and counterfeit agricultural products, Sri Lanka's navigation safety rating was below average. The government has been careful to maintain an adequate maritime presence since the end of the Sri Lankan Civil War in 2009 (Benson, 2020). Furthermore, as the Bay of Bengal report shows, permitting illicit actors full reign in the marine domain can have a significant impact on maritime security (Benson, 2020).

Thailand: Thailand has secured its maritime boundary by pursuing multilateral maritime cooperation in various maritime-related matters, likely trade and connectivity in terms of secure maritime zone. Bilateral cooperation and negotiation with India and Myanmar provide a dominant cooperation mode for ensuring different cooperation measures within and beyond the sub-region. For example, Thailand invested ventures in cooperation projects in maritime security awareness (Gamahe, 2021). Nowadays, Thailand struggles with maritime mixed migration, especially in maritime trafficking.

Landless Cambodians seeking urban employment prospects in Thailand to improve their living standards, as well as ethnic Rohingya refugees fleeing Myanmar's Rakhine state (Benson, 2020). Migration patterns can generate maritime risks, as the maritime security report "Stable Seas: Bay of Bengal" notes, if extensive surveillance and proper documentation are lacking (Benson, 2020).

Evaluation on collectivist approach towards BoB

Supporters of collectivism, such as Markus, Kitayama, and DuBois, pointed out that the notion of collectivism emphasizes interdependence. Countries with collectivist cultures are more likely to "view themselves as connected to others, define themselves in terms of relationships with others, and perceive their qualities as more likely to vary across situations" (AFS, 2019). Maintaining social peace, getting along with others, and achieving common expectations, on the other hand, are more important in collectivist cultures (AFS, 2019). Within the collectivist notion, there is a tendency to cooperate in indirect styles - collectivists indicate what they truly intend but may say otherwise to avoid confrontation or humiliation. It's also worth noting that in terms of social, cultural, and economic factors, the Asian continent is more collectivist.

At the same time, within the BoB international cooperation, the policies, attitudes and opinions of the member-states sometimes are distinct from each other impede the collectivist approach towards overall maritime security-related affairs. Such differences have been caused mainly because some of the member-states are already in better positioning. Especially it can be traced within the BIMSTEC cooperation. Thailand and Myanmar are both members of the Association of Southeast Asian Nations (ASEAN), which is often regarded as a successful regional organization (Wagner and Tripathi, 2018). Intraregional commerce between ASEAN member states accounted for roughly 29% of overall commodities trade prior to the epidemic (Wagner and Tripathi, 2018). The South Asian Association for Regional Cooperation (SAARC), which includes Bangladesh, Bhutan, India, and Nepal, is regarded a reasonably unsuccessful model of regional cooperation in Asia (Wagner and Tripathi, 2018). Intraregional commerce is only 7% of total trade (Wagner and Tripathi, 2018). Furthermore, wars between India and Pakistan (Indo-Pak) have often impeded the organization's expansion. As a result, there has been no regional cooperation in South Asia that adequately addresses the collectivist approach's main features. Nonetheless, due diligence has always been a consideration for the BoB worldwide management.

Conducting maritime due diligence: a comprehensive approach

Due diligence is the obligation imposed upon states to take measures to protect persons or activities inside or beyond their respective territories to prevent harmful events and outcomes (International Court of Justice, 1949): “every State’s obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States (International Court of Justice, 1949).” *Due diligence* on maritime security of the Bay of Bengal for the protection of vessels both nationally and internationally is the study area of the research. The concept of due diligence has exceptional value for the coastal countries of the Bay of Bengal, as they are using and utilizing their seas for exploring the state’s blue economy as the source of macroeconomic growth. However, maritime security across the Bay remain questionable and challenging for the coastal states. Piracy, terrorism, illegal migration, marine pollution and other political violence created a threat for coastal communities and required a due diligence criterion applied in assessing the obligation of coastal states on maritime security of the Bay of Bengal.

Due diligence within international law can play a crucial role in codifying state responsibilities, international liabilities of the states, and identifying the threats that caused damage to the maritime security of these coastal states. Due diligence in this regard is a process that does not require similar measures from all states (Koivurova, 2006). So, incorporation of the due diligence concept into domestic legislation can additionally contribute to their protection capacities. For example, the Netherlands introduced mandatory due diligence into domestic legislation to prevent child labour (Macchi and Bright, 2020). The Dutch Child labour due diligence law will come into effect in mid-2022. The law introduces a duty for companies providing goods and services to the Dutch end-users to undertake due diligence in order to identify and address the risk of child labour in their supply chains (Macchi and Bright, 2020). In analogy with mentioned law, the law obliging the maritime authorities to provide information on combatting piracy and illegal trade – reflecting due diligence concept, may appear helpful for not only increasing efforts of maritime authorities in ensuring the safety of navigation in territorial waters but also for increasing awareness of potential operators about the safety of navigation. So, *due diligence* is the procedural obligation of duty bearers.

International Organizations have immunities to enjoy and have no right to abuse these immunities. International law commission adopted draft articles on the responsibility of international organisations, with commentaries.

Article 63 A/66/10 of this draft says, “effect of this part is without prejudice to the international responsibility of the international organization which commits the act in question or of any State or other international organization (UN, 2011).”

Member states can apply for the introduction of due diligence obligations from third parties of international organisations once they cause harm (Daugirdas, 2020).

The responsibilities of international organisations have general cross-cutting obligations. Contrarily, the international organisations can dispute obligations derived from due diligence in domestic courts or other fora if the client's state is at environmental and social risks, which cause harm to the sustainability framework of International organisations (Campbell et al., 2018).

For example, International Finance Corporation (IFC) enjoys immunities under the environmental and sustainability policy. Article 6 of its agreement gives IFC due diligence responsibility to supervise and ensure members' performances.

This monitoring right IFC adhere upon signing the legal agreement to dispute if its members' rights are damaged or in a case of transboundary harms or member states fail to adhere commitments (Young, 2012).

Based on reviewing the maritime security management system, it is possible to conclude that the BoB zone is vulnerable in finding a sustainable and long-term solution for a holistic approach to policymaking.

Threats and diverse challenges demand an assessment on sustainable development that includes sustainable practices for protecting illegal and unsustainable practices by member states (Table 4).

Due Diligence aspects in BoB zone	Marine Security
<i>Hypothesis creation:</i>	• BoB's environmental protection under international environmental law and UNCLOS Articles 145, 236, 237 on the protection and preservation of the marine environment must be reconciled based on the material treaty, international environmental law and customary law norms imposing due diligence responsibilities. Every party has responsibilities and liabilities. • Protection of human rights under international human rights, International Humanitarian Law, Article 146 of UNCLOS protection of human life
<i>Impact & Threats:</i>	• Climate risks: (Basu, 2020) (Chowdhury et al., 2015) 1) severe cyclones & thunderstorms 2) a high sea level & temperature rise 3) Flood risks, soil erosion & landfalls 4) salinity & Ocean acidification • Illegal, Unreported & Unregulated (IUU) fishing • Illicit trades & piracy • Coastal welfare & unsustainable tourism industries • Poor governance: (BIMSTEC) 1) Poor capacity in International cooperation 2) Poor judicial integrity 3) The Weak rule of law & illicit networking 4) Poorly managed law of the sea and enforcement • Imbalance the socio-economic status of the members.
<i>Identify state responsibilities:</i>	- "The responsibility to ensure that activities within their (states) jurisdiction or control do not cause damage to the environment of other States or of areas beyond national jurisdiction." (Koivurova, 2006) - Encourage "International cooperation at all levels, particularly at the regional, sub-regional and bilateral levels are encouraged by the article 268 of UNCLOS"
<i>Analysis of obligations:</i> (Kovurova, 2006)	- "State's legal responsibility on the consequent of significant damages caused to the environment of other States." - "State's conduct is compared to what a 'reasonable' or 'good.'" - "government would do in a specific situation of transboundary harm." - "State has acted diligently or not". (good & best evidences) - Extra precautions, - obligations to cooperate in cases of specific transboundary harm situations - The concerned States are also obligated to exchange information on preventive duties where already operative activities are concerned.
<i>Value creation:</i>	- Blue economy brings economic resilience - Climate justice - Geopolitical context - Greater peace and stability of the marine environment
<i>Strategic Determination:</i> (Mohammad and Ahmad, 2015)	- Influence, interest and power of littoral and non- littoral countries - Maritime presence and growth - Projection on capacities, motivation and significant involvement of developing and geographically disadvantaged states without prejudice under the article 70/6 of UNCLOS
<i>The expectation for the future management</i>	- Developments of customary law - necessary legislative, administrative or other actions for law and enforcement - Port welfare establishment of infrastructure, suitable monitoring mechanisms - States shall exercise due diligence in order to negotiate/eliminate/ mitigate harm - Good relations within and between littoral and non-littoral - Ensure cooperative behavior of major players - Strong provisions of compensation and sanctions - Balanced economic stability

Table 4: Due diligence and the BoB management

Conclusions

Blue economy aspects of the BoB zone depend on sustainable corporate governance and actions and mandatory due diligence towards sustainable objectives. However, some countries that are much more active at the international level are supposed to put little more effort into complying with due diligence for protecting the maritime security of this zone.

As we noted in the previous sections of the article, one of the challenges in the governance of the Bay of Bengal is the ineffective management system of the BIMSTEC, including insufficient capacity in International cooperation, poor judicial integrity, the weak rule of law & illicit networking and poorly managed law of the sea and enforcement. We would recommend explicit incorporation of the due diligence concept to domestic maritime legislation within the BIMSTEC as a way of maintaining states' responsibility to ensure that activities under their jurisdiction or control do not harm the environment of other States or areas beyond national jurisdiction.

ASEAN activated due diligence for identifying and response fraud and risks, targeting transparent governance and the rule of law in Southeast Asia. (ASEAN, 2021) However, some of the littoral countries of the Bay of Bengal are not an official part of ASEAN, creating a challenge in successful combating unhealthy practices of the blue economy of those countries that are not part of ASEAN. An independent international body for ensuring due diligence for hindering systematic barriers of BoB littoral countries could truly balance the need of the littoral countries for their economic growth. Regional governments of the littoral countries need to follow collectively planned and managed systems to control regional activities, facilitating vigorous marine management. A due diligence guideline is essential for raising awareness of the private sector and governments regarding sustainable business behavior in the region and maritime protection of the Bay of Bengal.

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Factors Affecting Profitability of Insurance Companies. Evidence from Kosovo

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Abstract

Profitability expresses the ability to make a profit from all the business activities of the company. It shows how efficiently management generates profit by utilizing all available resources. This paper examined the effects of specific company factors, namely independent variables such as: liquidity, company size, company age, tangible asset, leverage, company capital and growth of company, on profitability represented by return on assets (ROA) and net profit margin (NPM) as a dependent variable. The sample in this study includes eleven insurance companies for the period 2015 - 2020. The regression results indicate that size, leverage and age of company, have significant effects on the ROA. Meanwhile in NPM of insurance companies in Kosovo size of company and firm growth have significant effects.

Keywords: profitability; return on assets; net profit margin; liquidity; leverage.

Introduction

The insurance industry dates back centuries. The first insurance activity appears to have taken place in 1680 at the Edward Lloyd's Café in London which became famous for ship-owners, merchants and ship captains, being transformed in a reliable source of information on ship navigation (Bodie et al. 2013). It became a meeting place for parties who wished to insure their goods and ships and for those willing to insure such an adventure or danger. Such activity was mainly aimed at providing risks to which marine activities could be involved. Since then, the insurance sector has grown rapidly, mainly due to the expansion of economic activity and increased risk and uncertainty (Alhassan & Biekpe, 2016; Canh et al. 2020). Nowadays, the insurance sector plays a vital role for households, companies and the economy in general. For households, the insurance industry allows them to protect themselves from risks and provides them with financial protection (Cai, 2016). For companies, the presence of a developed insurance sector allows the transfer of savings to more productive investments in the economy (Cummins et al., 2018). As a financial intermediary, the insurance sector generates an additional source of financial competition, which can stimulate the productive efficiency and performance of companies (Azman-Saini & Smith, 2011). Finally, the insurance sector is also

crucial for the whole economy as it provides risk transfer, indemnification services and other financial intermediation services (Ben Dhiab, 2021).

The Kosovo insurance market has experienced a relatively positive development over the last decade and has been characterized by ongoing reforms, especially with the new companies by offering new services (Baruti, 2020). Currently, there are thirteen insurance companies operating on the market offering a variety of products. The supervisory and regulatory institution, the Central Bank of Kosovo, approves the licensing and supervision of insurance companies in the country, based on law 05/L - 045 Law on Insurances (Baruti, 2020).

The insurance market in Kosovo is characterized by a lower degree of concentration compared to other sectors of the Kosovo financial system. Insurance sector assets in 2020 represented 2.8% of total financial system assets. Non-life insurance, which also has the highest participation in the total assets of the sector (91.4%), marked an annual increase of 12.0% in 2020, while life insurance, which constitutes the remaining part of the assets, marked an annual increase of 7.3% (CBK - Annual Report 2020). Also, there was an increase in the share of capital, an increase that is mainly attributed to the increase of paid-in share capital, which increased by 7.2 million euros compared to the previous year, to 91.3 thousand million of euros. Increased impact, but to a lesser extent, had the profit realized during 2020, in the amount of 3.4 million euros (CBK - Annual Report 2020). This paper has two purposes. First, to show the impact of various factors on the performance of insurance companies in Kosovo. Second, to contribute to the current literature, given the fact that we do not have much research covering Kosovo and the insurance market.

Literature review

Profitability in insurance companies can be influenced by a number of determining factors. These factors can be further classified as internal, industry and macroeconomic factors, while most of the researchers and our study focused on the internal factors that affect profitability and most of the factors considered are the age of the company, size of the company, tangible assets, leverage ratio, growth rate, premium growth rate and liquidity ratio. The literature mainly focuses on the factors that affect the profitability of banks and not insurance companies. Among the studies performed before 2000 in this field, we can mention Spiller, 1972; Adams, 1996; Chidambaran et al., 1997; Cummins and Weiss, 1998; Genetay, 1999. In the following years, several studies focused on the effects of insurance on financial stability and economic growth (Angoff & Brown, 2007; Sandra et al. 2007; Ben Dhiab & Jouili, 2015; French et al., 2015; Baruti 2020; Apergis & Poufinas, 2020). Other studies and therefore our study, have focused on analyzing the factors that affect the profitability of insurance companies (Born, 2001; McGahan & Porter, 2002; Slade and Rain, 2004; Mahmoud, 2008; Feyen, Lester & Rocha, 2011; Ahmed, Beck & Webb, Malik, 2011; Gurung, 2012; Charumathi, 2012, etc.).

As described in the literature presented below, numerous studies have been conducted in order to determine the factors that affect the profitability of insurance companies. However, the results obtained vary from country to country. This means that a profitability model cannot be repeated in all circumstances. In this context, Kozak (2011) focuses on the profitability of 25 Polish non-life insurance companies between 2002 and 2009. Empirical study shows that the amount of gross written premiums has a significant and positive impact on the profitability of insurance companies.

According to Pervan et al. (2012), the ROA of insurance companies in Bosnia and Herzegovina during the period 2005-2010 is determined by company size, underwriting risk and return on capital. Ayele (2012) found that profitability (as a dependent variable) is the significant determinant of any institution. Specific factors (independent variable) that affect profitability are: age of the company, size of the company, volume of capital, leverage, ratio of liquidity, growth of the company and tangible assets. The main indicator to measure profitability is ROA, which is positively related to the growth of the company, the size of the company and the volume of capital, but affected negatively by leverage and liquidity. The study shows that there is no relationship between profitability, company age and asset tangibility. Almajali (2012) aims to investigate the factors that most affect the financial performance of Jordanian insurance companies. The study population consisted of 25 insurance companies listed on the Amman Stock Exchange during the period 2002-2007. The results showed that variables such as: leverage, liquidity, size, index of management competencies, have a positive statistical effect on the financial performance of Jordanian insurance companies. Doğan (2013) examined the impact of company-specific factors (loss ratio, leverage ratio, liquidity, company size, and company age) on the profitability of insurance companies listed on the Istanbul Stock Exchange for the period 2005–2011. According to the results, there is a positive and significant relationship between the size and profitability of insurance companies. However, profitability is significantly and negatively affected by the loss report, leverage ratio, current ratio and age of the company. Tailab (2014), in his study, with the sample of 100 major American non-financial firms, for the period 2009-2013, analyzed factors such as: leverage, liquidity, mobility, company size and size and the impact of financial rubber performance. As a measure of financial performance, the author uses ROA as a ratio of EBITDA to total assets.

Moro and Anderloni (2014) investigate the influence of specific factors on insurance performance in 198 European insurance companies between 2002 and 2014. The authors conclude that asset size and diversification negatively affect ROA, while reserves dimension and asset turnover positively impact. Batrinca and Burca (2014) analyzed micro and macroeconomic financial determinants for the period 2008-2012 in 21 insurance companies operating in Romania. The economic activity of insurance companies was assessed through ROA, while as independent variables were taken

a total of 13 (leverage, business size, number of years of activity in the Romanian market, gross written premium development, equity, full market value, diversification, risk insurance, investment ratio, retained risk ratio, solvency margin and per capita GDP development). Cekrezi (2015) has studied on financial performance of Albanian insurance companies. The leverage, tangibility, flexibility, size, and risk were taken as independent variables. The results revealed that there was positive and significant relationship between tangibility and flexibility with performance indicator ROA. The variables debt ratio and risk were negative and significant effects on performance. The size did not role to performance measured in Albania.

Kaya (2015) investigates a company-specific factors that affect the profitability of non-life insurance companies operating in Turkey. For this purpose, data were obtained from 24 non-life insurance companies operating in Turkey from 2006 - 2013. In this study, profitability is measured by two different variables: technical profitability ratio and sales profitability ratio. According to the empirical results, the specific factors of the firm that affect the profitability of Turkish non-life insurance companies are the size of the company, the age of the company, the loss ratio, the current ratio and the premium growth rate. Kripa & Ajasllari (2016) showed that factors such as growth rate, liabilities, liquidity and fixed assets are the main factors affecting the profitability of insurance companies, where the growth rate is positively related with profitability, while liabilities, liquidity and fixed assets are negatively related. The size of the company and the volume of capital are positively related to the profitability of insurance companies, but their impact is statistically insignificant. Kramaric et al. (2017) analyzed the impact of insurance company specific variables, insurance industry specific variables and macroeconomic variables on the performance of insurance markets in the insurance industry in Croatia, Slovenia, Hungary and Poland in the period 2010 - 2014. Two performance variables were used in the model, return on assets and return on equity, including explanatory variables of company size measured based on gross written premium, the portion of the premium transferred to reinsurance, the combined ratio, the organizational form dummy variable referring to joint stock companies or mutual and real GDP per capita growth. Employing static panel model results of the analysis reveal that variable age positively and significantly affect performance when measured with both ROA and ROE. Moreover, another variable that significantly influences performance in terms of ROE is real GDP per capita growth taking a positive sign. Berhe and Kaur (2017) selected 17 public and private insurance companies in Ethiopia for the period from 2005 to 2015. The results of the regression analysis revealed that the size of insurance, capital adequacy, liquidity ratio and GDP growth rate were the main factors that significantly affect the profitability of insurance companies. On the other hand, the leverage ratio, the loss ratio, the market share controlled by the company and the inflation rate were found to have a negligible effect on profitability of insurance companies. Alomari (2017) investigate the effects of a firm-specific factor

on the performance of Jordanian insurance companies measured by return on assets which is considered a representative of profitability. The findings show that liquidity, leverage and underwriting risk are statistically significant with a negative impact on the performance of insurers. Moreover, the market share and the size of the company, have a statistically significant positive impact on the performance of the Jordanian insurance industry.

Zainudin et al. (2018) studied firm-specific internal factors influencing the profitability performance of selected life insurance firms in eight Asian countries (China, Hong Kong, Taiwan, Singapore, Japan, South Korea, Thailand, and Malaysia) from 2008-2014. A random effect model reveals that size, volume of capital and underwriting risk are significantly related to the profitability of Asian life insurance firm, measured as return on assets. Premium growth, tangible assets and liquidity are insignificant predictors of the profitability performance of these life insurance firms. Banerjee and Majumdar (2018) explores the variables: the firm's age, retention ratio, capital adequacy, underwriting risk/loss ratio, financial leverage, reinsurance dependency, and macroeconomic factors such as GDP per capita, inflation rate considered as independent factors. The return on asset is the key measuring indicator; it is regarded as the dependent variable for financial performance measures. The analysis suggests that there are important and constructive relationships between the size, capital adequacy, and reinsurance dependency, while loss ratio, retention ratio, and financial leverage indicate a major negative relationship. There is no relationship between GDP per capita and inflation. Shavar and Siddiqui (2019) analyzed the data through the regression model, to identify the determinants of profitability of insurance companies in Pakistan. Gross written premium, claim, reinsurance, management expenses, interest rate, size, leverage and real GDP were taken as independent variables, while from sales profitability, investment income and signature profit, were taken as representatives of financial performance. Abebe and Abera (2019), aimed identify the determinants of financial performance in Ethiopian insurance companies during the period 2010 - 2015. As a profitability ratios were used return on assets and return on equity. The evaluation results showed that capital adequacy, liquidity, size, loss and leverage were the main determinants of financial performance. Deyganto (2019) analyzes the factors affecting in profitability of insurance companies by sampling 17 insurance companies in Ethiopia for the period 2008-2018. The result of this study showed that out of eight explanatory variables incorporated in the model, five variables such as underwriting risk, premium growth, solvency ratio, growth rate of GDP and inflation rate have significant effect on financial performance of the insurance companies. Whereas, the reinsurance dependence, company size and interest rate have no significant effect on financial performance of the insurance companies.

Wongsuwatt et al. (2020) in their study analyzed the impact of the loss ratio on the profitability of non-life insurance companies in Thailand. The results found significant negative correlations between the loss ratio and the profitability of non-life insurance companies related to profit, return on assets, return on equity, profit margin and net profit margin. Wolde et al. (2020) attempted to examine the factors influencing the profitability of insurance companies in Ethiopia for the period 2014-2018. The researchers found that the positive and significant relationship between ROA and liquidity, capital adequacy, real GDP, and the real effective exchange rate. In contrast, ROA has negative and significant correlations with leverage, signing risk, premium increase. In addition, ROA has positive and insignificant links with age and size, while negative and insignificant links with inflation. Tegegn et al. (2020) analyzed the profitability factors of insurance companies taking ROA as a measure of profitability (dependent variable) while age of company, company size, premium growth rate, leverage, liquidity ratio and tangible assets are independent variables. Bhattarai (2020), took return on equity as profitability measures (dependent variable). The study also has employees expenses ratio, financial leverage and company size factors as independent variables. The results reveal that expenses ratio other independent variables have positive relationship found. The results of study concluded that the financial leverage and size have major determinants of the profitability in Nepalese insurance companies.

Dhiab (2021), examines the determinants of profitability in the Saudi insurance sector. Empirical findings suggest that the written premium growth rate, tangibility ratio and fixed asset ratio are the main factors that positively affect the profitability of Saudi insurance companies. Moreover, although company size and liquidity ratio are positively correlated with profitability, their impacts are not statistically significant. On the contrary, the loss ratio, the ratio of liabilities, the ratio of insurance leverage and to a lesser extent the size of the company, have negative effects on the profitability of Saudi insurance companies.

Research methodology

Measurement of variables and hypothesis

Based on the literature review and the applied model, we have analyzed our variables and made the following hypotheses:

Profitability (ROA and NPM) – is measured using Return on Assets and Net Profit Margin. Return on Assets (ROA) is a major ratio that indicates the financial performance of a firm. It is an indicator of how profitable a company is relative to its total asset. It measures the ability of the firm's management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the

company are used to generate the income (Amahalu, et al., 2019). This profitability ratio shows management efficiency, and rate of returns. It further indicates the efficiency of the management of a company in generating net income from all the resources of the organisation. A higher ROA shows that the company is more efficient in using its resources (Horton, 2018). The net profit margin, or simply net margin, measures how much net income or profit is generated as a percentage of revenue. It is the ratio of net profits to revenues for a company or business segment. Net profit margin is typically expressed as a percentage but can also be represented in decimal form.

Leverage (LEV) – The broader definition of leverage is the ratio of total liabilities to total assets, as it provides an in-depth overview of the short-term and long-term debt policy of each organization. Ferri and Jones (1979) used this variable in their empirical model to measure the impact of different variables on financial leverage. According to Wald (1999), the ratio of total debt to total assets is more sensitive to financial crises compared to the ratio of long-term debt. Other authors such as: Deyganto, (2021), Sriram et al. (2020), Gizem and Acar (2017), Kumar (2017), Juca et al. (2017), in their works used leverage as a dependent variable. Renbao Chen and Rie Ann Wong (2004) stated that higher than optimal level may result in higher risk and lower value of the audit firm. Leverage reflects the ability of insurance companies to manage exposure to unexpected losses. In this study, leverage was measured as the debt-to-equity ratio. Therefore, we present this hypothesis:

H1: There is a negative correlation between leverage and the performance of insurance companies.

Company age (measured as the number of years a company has been operating in the market since its foundation) is an important determinant of financial performance. Past research shows that the probability of company failure decreases with the age of the company (Yasuda, 2005). Regarding the number of years since the insurer operates in the Kosovo insurance market, a positive relationship is expected between this variable and the financial performance of the insurer, because the company gains a certain reputation, greater experience and develops effective strategies over the years. The age of a firm has also been examined before in performance studies as a control variable. In this study, age was measured as the number of years since the establishment of an insurance firm. Consequently, we present this hypothesis:

H2: There is a positive correlation between company age and its performance.

Company size – (the logarithm of the total assets of the insurance company) is one of the most well-known determinants of a financial performance (Beard & Dess, 1981). The causal relationships between size and financial performance have been extensively tested with unclear results. Some studies suggest that there is a positive relationship between company size and financial performance. Larger companies are supposed

to be more efficient than smaller ones. Market power and access to the capital markets of large firms can give them access to investment opportunities that are not available to smaller ones (Amato & Wilder, 1985). The size of the company is calculated as the logarithm of the total assets of the insurance company. A positive correlation between company size and its financial performance is expected, as larger firms have more resources, better risk diversification, complex information systems, and better cost management. According to Athanasoglou, et al., (2008) the effect of a company's size on performance has been proven to be positive in many studies. As a result, a positive relationship between size and performance is expected from many insurance researchers. Therefore, we present the following hypothesis:

H3: There is a positive correlation between company size and company performance.

Company Capital (EQ)- which is the capital accumulated by the owners in the company, is the remaining claimant or interest of the smallest class of investors in the property, after all liabilities have been paid; if the liability exceeds the assets, there is negative capital (Hansen, 1999). More capital inflows will enable players to expand and open new branches, which in turn will incur more operating costs. A higher retention ratio with a lower claims ratio is likely to affect insurers' performance positively. Theoretically, a more efficient insurance company should have increased profits as it is able to maximize its net premiums and net signature income (Charumathi, 2012). With respect to capital measured through the December logarithm, a positive correlation is expected between their volume and the financial performance of insurers, given that a greater inflow of capital generates better financial stability and the possibility of business expansion. Therefore, we present this hypothesis:

H4: There is a positive relationship between company capital and the performance of insurance companies.

Tangible Assets (TAN) - used to measure the level of collateral a firm can offer to its debtors. This variable is positively correlated with firm leverage as it assures the lender that his loan is backed by some collateral assets. Most of the empirical findings in developed and developing countries resulted in direct correlation of debt level with tangible assets (Yensu et al. 2021; Deyganto, 2021; Sriram et al. 2020; Sibindi, 2018; Sheikh & Qureshi, 2017). Malik (2011) found that there is a positive and significant relationship between fixed assets and the performance of insurance companies and argued that the higher the level of fixed assets, the older and larger the company of insurance. In contrast, Yuqi Li (2007) in the UK found no significant correlation between fixed assets and the performance of insurance companies. This variable is measured as the ratio of fixed assets to total fixed assets and regarding the ratio of this variable we present this hypothesis:

H5: There is a positive correlation between tangible assets and the performance of insurance companies.

Liquidity (LIQ) - Another determinant of financial performance is the level of liquidity. Liquidity refers to the degree to which debt liabilities that arise in the next twelve months can be repaid in cash or assets that will be converted into cash. Liquidity is the ability of insurers to meet their immediate commitments to insurers without having to increase profits from subscriptions and investment activities and / or liquidate financial assets (Adams & Buckle, 2003). According to Subrahmanyam and Titman (2001), liquidity improves the financial performance of the firm's operation. Browne et al., (2001) found evidence to support that performance is positively related to the percentage of liquid assets in the asset composition of a life insurance company. Higher liquidity allows a firm to deal with contingencies and meet its obligations during periods of low profits (Liargovas & Skandalis, 2008). We routinely put forward this hypothesis:

H6: There is a positive correlation between company liquidity and the performance of insurance companies.

Company Growth (FRg)- Firms with higher investment opportunities tend to grow relatively faster. Theoretically, faster-growing firms could receive higher ratings, as they are expected to perform better in the future (Klapper and Love, 2004). Previous studies also find that there is a positive correlation between firm growth and firm performance (Siagian et al., 2013; See et al., 2015) and suggested that growing companies are more likely to have net profit margins on higher, higher firm value and better firm performance. Therefore, we present this hypothesis:

H7: There is a positive correlation between company growth and the performance of insurance companies.

Data and model specification

The study examines the impact of audit quality on the financial performance of insurance companies operating in Kosovo for the six (6) separate period from 2015 to 2020. Since we are limited to measuring directly, the impact of audit performance on insurance companies, the following table presents the values of ROA and NPM for insurance companies in Kosovo.

To analyze in more detail other variables that may have an impact on the performance of these companies we have used the following linear model testing the potential impact of these variables on the performance of insurance companies. The study uses data from secondary sources through the annual reports of insurance companies, while as a tool of data analysis was used the linear regression technique, created to investigate the hypothesized relationships between the dependent variable and

independent variables in this study. The econometric composition of the equation is given as follows:

$$FP = \beta_0 + \beta_1 LEV + \beta_2 AGE + \beta_3 SZ + \beta_4 EQ + \beta_5 TANG + \beta_6 LIQ + \beta_7 FGr + \varepsilon$$

The definitions of these variables are presented in Table 2 below:

Variables	Symbol	Measurements	Sources
<i>Dependent variable</i>			
Profitability	ROA	Net income / Total assets	Afza and Nazir, 2014; Matoke & Omwenga, 2016; Monametsi & Agasha, 2020; Ike et al. 2020;
Profitability	NPM	Net profit / Revenues	Horne and Wachowicz, 2012; Lukiç et al. 2018
<i>Independent variable</i>			
Leverage	LEV	The proportion of debts to total assets.	Renbao Chen and Rie Ann Wong, 2004; Monametsi & Agasha, 2020; Chinedu, 2020; Carp & Istrate, 2021;
Firm age	AGE	Measured as the number of years a company has been operating in the market since its foundation	Kaya, 2015; Gao & Huang, 2016; Kouaib & Jarboui, 2017; Majumdar, 2018;
Firm size	LNASSET	Size of the company will be measured as the natural logarithm of the book value of total assets at the end of the year	Farouk & Hassan, 2014; Monametsi & Agasha, 2020; Aca et al, 2020; Amahalu, 2020; Chinedu, 2020;
Company capital	EQ	Log of Equity capital	Hansen, 1999; Ikoniç, 2011; Charumathi, 2012;
Tangible assets	TANG	Fixed assets / Total assets	Yensu et al. 2021; Deyganto, 2021; Sriram et al. 2020; Sibindi, 2018; Sheikh, Qureshi, 2017
Liquidity	LIQ	Total current assets to total current liabilities.	Elsiefy, 2013; Wongsuwatt et al., 2020; Simoens & Vennet, 2020; Haddad et al., 2020;
Firm Growth	FGr	Firm Growth = Premium growth (PG (t)- PG (t-1)/ PG (t-1))	Collins et al., 2017; Huang et al., 2017; Ado et al. 2020;

Source: Authors

Presentation and analysis of data

This session presents the results of the empirical study. It is concerned with the presentation, analysis and interpretation of data collected from the secondary resources. The session makes conclusion and recommendations from the findings of the study. For the purpose of this study, the data collected were coded and presented in tables. The Ordinary Least Square method (OLS) was used in testing the stated hypotheses.

Descriptive Statistics for ROA and NPM

The descriptive statistics for each of the variables were determined to show the minimum, maximum, mean and standard deviation values. Descriptive statistics helps readers to understand the measures of central tendency and measures of variances associated with the variables of the study.

Variable	Obs	Mean	Std.Dev.	Min	Max
Roa	65	-.0137077	.0787103	-.403	.116
Npm	65	-.0535385	.2574432	-1.243	.262
Lev	65	.6832615	.1416306	.095	.961
Age_in	65	2.607185	.4611145	1.792	3.045
Size_log	65	7.117154	.1620987	6.68	7.392
Eq_log	65	6.562169	.2704679	5.554	7.407
Ta_tang	65	.2680462	.7313814	.011	4.614
Liq_rat	65	2.144462	3.345353	.051	14.884
fgr	65	.0127846	.5922748	-1	3.473

Table 2. Descriptive Statistics

Source: Authors

The descriptive indicators in table 2 are calculated for the 65 observations for the period 2015 to 2020. We can note that the mean value of the ROA ratio is – 1.37% while for NPM is – 5.35%: The standard deviation, measuring the dispersion of ROA and NPM from their mean, shows that profitability deviates 7.87% for ROA while 25.74% for NPM, from its mean. The minimum value of the ROA is –40.3% while for NPM is – 124.3%. The highest value of firm's performance i.e ROA in the sample is about 11.6% while for NPM is 26.2%.

Correlation coefficients for ROA and NPM

According to Pallant (2011), he stated that the correlation analysis is very important in portraying the direction and strength of the undeviating association amongst studied variables. Joseph (2010) also proposed that the correlation value of 0 indicates no relationship, whereas the correlation ± 1.0 implies an excellent relationship. This is in consistent with the revelation of Hair, Black, Babin, Anderson, and Tatham (2010) which posited that the correlation matrix ought not to exceed 0.70 to guarantee that the multicollinearity problem is not in existence in this study.

The correlation coefficient is the bivariate relationship between each two variables as presented in Table 3. From Table 3, ROA and NPM has a positive relationship with size of the company, equity, liquidity and growth of premium and a negative relationship with leverage, age of company and tangible assets. The high correlation between independent variables can be problematic in the regression analysis but the strongest relationship between independent variables is 0.5472 between leverage and age.

Variable	Roa	Npm	Lev	Age_In	Size_log	Eq_log	Ta_tang	Liq_rat	fgr
Roa	1.0000								
Npm	0.7121	1.0000							
Lev	-0.2345	-0.0760	1.0000						
Age_In	-0.2523	0.0236	0.5472	1.0000					
Size_log	0.2331	0.3032	0.4862	0.4246	1.0000				
Eq_log	0.3326	0.2584	-0.1891	-0.3899	0.1920	1.0000			
Ta_tang	-0.0800	-0.0445	0.1346	0.1579	0.0047	-0.1521	1.0000		
Liq_rat	0.129	0.1040	0.0153	0.0803	0.0550	0.0949	-0.1069	1.0000	
fgr	0.1489	0.2356	0.1436	0.1399	0.2127	-0.0604	-0,0584	0.0284	1.0000

Table 3. Correlation matrix
Source: Authors

Estimations and Results

In the following table we have tested the variables that represent the firm characteristics and ROA as performance measures. From the results of the first model we see that leverage, firm size and age have statistical significance. Age and size of the firm have a positive impact, while the leverage a negative one.

Variable	Coefficient	Std. Error	t-ratio	p-value	
const	-1.49370	0.428586	-3.485	0.0009	***
LEV	-0.175717	0.0779712	-2.254	0.0280	**
AGE_LN	0.0466523	0.0259898	1.795	0.0779	*
SIZE_LN	0.218041	0.0706578	3.086	0.0031	***
EQ_LN	0.0248223	0.0391213	0.6345	0.5283	
TA_TANG	0.00394025	0.0121250	0.3250	0.7464	
LIQ_RAT	0.00286878	0.00262292	1.094	0.2786	
FGr	0.0194840	0.0149032	1.307	0.1962	

Mean dependent var	-0.012909	S.D. dependent var	0.078371
Sum squared residual	0.274934	S.E. of regression	0.068849
R-squared	0.311349	Adjusted R-squared	0.228236
F(7, 58)	3.746085	P-value(F)	0.002060
Log-likelihood	87.21906	Akaike criterion	-158.4381
Schwarz criterion	-140.9209	Hannan-Quinn	-151.5162
rho	-0.249431	Durbin-Watson	2.088071

Table 4. ROA and characteristics of insurance companies - Model (1)
Source: Authors calculations

Note: Model 1 - Pooled OLS, using 65 observations, included 11 cross-sectional units, Time-series length = 6, Dependent variable: ROA

Substituting ROA with NPM as a dependent variable, with the same independent variables we tested the second model. From the following results we understand that we have two significant variables, the size and the growth of the firm.

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	-4.66308	1.48781	-3.134	0.0027	***
LEV	-0.443135	0.270672	-1.637	0.1070	
AGE_LN	0.0138764	0.0902218	0.1538	0.8783	
SIZE_LN	0.565007	0.245284	2.303	0.0249	**
EQ_LN	0.138929	0.135807	1.023	0.3106	
TA_TANG	0.0113278	0.0420910	0.2691	0.7888	
LIQ_RAT	0.00563339	0.00910526	0.6187	0.5385	
FGr	0.0910824	0.0517353	1.761	0.0836	*

Mean dependent var	-0.051652	S.D. dependent var	0.255915
Sum squared resaid	3.313181	S.E. of regression	0.239006
R-squared	0.221710	Adjusted R-squared	0.127779
F(7, 58)	2.360342	P-value(F)	0.034199
Log-likelihood	5.077677	Akaike criterion	5.844646
Schwarz criterion	23.36188	Hannan-Quinn	12.76654
rho	-0.108558	Durbin-Watson	1.970035

Table 5. NPM and characteristics of insurance companies - Model (2)

Source: Authors calculations

Note: Model 2 - Pooled OLS, using 65 observations; Included 11 cross-sectional units; Time-series length = 6; Dependent variable: NPM

The results for the hypotheses were tested, including in the table above the standardized coefficients of the variables, the values *t* and the *p*-values for the linear regression equations. Moreover, Fisher's statistics of 2,708 which are significant in one percent show that the financial performance model is appropriate. Therefore, we can rely on the results of this study. While the R-square has a percentage of 32%, which means that 32% of the changes in ROA come as a result of the key variables we have included in the model.

The variable that measures the leverage of insurance companies is negative and significant, which confirms our first hypothesis that there is a negative and significant relationship between leverage and ROA. The author Kaguri (2013) has similar results. Great attention should be paid to leverage as companies that are multi-leverage may be at risk of bankruptcy if they are unable to pay their debt; they may also not be able to find new lenders in the future. On the other hand, borrowing can increase the return of shareholders on their investments and make good use of the tax advantages associated with borrowing (Kaguri, 2013).

Our second hypothesis, which expresses the ratio between the age of the insurance company and its performance, is confirmed by the positive coefficient of the age variable (0.44), but not the significance in this model. However, the age of the firm (measured as the number of years a company has been operating in the market since its foundation) is an important determinant of financial performance, in some of our following models. Consequently new companies are more dynamic and more volatile in their growth experience than older companies. Maturity brings increased stability as firms learn more accurately their market positioning, cost structures and efficiency levels.

The positive relationship between company size and ROA means that size is used to capture the fact that larger insurance companies are better at utilizing economies of scale in transactions and enjoy a higher level of profits. Authors such as Sambasivam, and Ayele (2013), Vijayakumar and Tamizhselvan (2010) have similar results. The study also recommends a high consideration of increasing the assets of companies. This is because the size of the company is an important factor as it affects its competitive power. Small companies have less power than large ones; therefore they may find it difficult to compete with large firms especially in highly competitive markets. This variable also confirms our first hypothesis, that the size of the firm has a positive impact on the performance of the company. The result of the variable is 0.22, see table above. However this connection is not significant.

Our fourth hypothesis, which represents a positive relationship between capital and ROA, is confirmed by the positive coefficient of the capital variable (0.0111). This means that there is a positive but weak connection as it is not significant. Kamau (2010) has similar results. In his study on the relationship between capital structure and financial performance of insurance companies in Kenya he found that there was a positive but weak relationship between capital structure and financial performance.

The hypothesis which shows the ratio between tangible assets and the performance of insurance companies in Kosovo, has been confirmed through the positive coefficient of tangible assets. The coefficient of this variable is 0.005, which confirms our hypothesis, that there is a positive relationship between tangible assets and the performance of insurance companies, but this relationship is not significant. The author Kaguri (2013) has similar results.

Regarding the liquidity variable we have a positive variable (0.003), but not significant, which means that there is a weak correlation between it and the ROA variable, but this allows us to confirm our sixth hypothesis for a positive ratio between these variables. According to Subrahmanyam and Titman (2001), liquidity improves the financial performance of the firm's operation. Insurance companies with more liquid assets are less likely to fail because they can make money in times of need, thus

outperforming those with less liquid assets. Browne et al., (2001) found evidence to support that performance is positively correlated with the percentage of liquid assets in the asset composition of an insurance company. Higher liquidity allows a firm to deal with contingencies and meet its obligations during periods of low profits (Liargovas & Skandalis, 2008).

The variable which measures the growth of the firm, shows a positive coefficient (0.012) but not significant, confirms our seventh hypothesis, for the positive correlation of this variable with ROA. Theoretically, faster growing firms could get higher rating as they are expected to have a better performance in the future. However, this variable is significant and positive in the next model, when we have tested the performance of the NPM variable, so we will comment in more detail in the following model.

Conclusions

In this study, factors affecting the profitability of insurance companies operating in Kosovo were analyzed using OLS regression analysis. The aim of the current study is to examine empirically the factors affecting the profitability of insurance companies in Kosovo measured by ROA and NPM. The analysis is based on a dataset relative to 11 insurance companies between 2015 and 2020, collected from the annual reports of those insurance companies. In terms of econometric results, they tell us that the variables that have an impact on profitability of insurance companies in Kosovo are: leverage, company age, company growth, and the size of company. Current companies but also new companies entering the market should take into account and carefully analyze these variables. Insurance companies in Kosovo should pay more attention to these factors given their important role in affecting their financial performance. In other research, we recommend researching other variables as well, also increase samples with companies from other Balkan countries.

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Community of Practice as a teaching approach in a postgraduate environment.

An insider ethnography of a higher education institution in South Africa

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Abstract

This auto-ethnographic description of the experiences in the development of the teaching and learning approach, at the postgraduate level, introduces the impact of the community of practice in the development of the learning processes in South Africa, with an international view. The principles of community of practice are outlined and the theoretical grounding is provided in terms of the notion of assemblage theory, the definitions of fundamental and derivative epistemic authority, as well as the assemblage boundary and the personal intents of the community of practice members. The theoretical grounding is then applied through several iterations of the community of practice between 2006 and present. The adaptive nature of the community of practice as an assemblage and the function as a sociology-of-knowledge system are outlined.

Keywords: community of practice; teaching approach; learning; assemblage theory; sociology of knowledge; South Africa.

Introduction

This work is an attempt to describe some aspects of teaching I have been involved in at postgraduate level at a South African University between 2006 and present. Aspects of international collaborations will also be mentioned and the activities I have been involved in are going to be discussed. Challenges that I have faced in teaching have been caused by various factors. Firstly, there existed a gap in my understanding of the links between knowledge and the social settings in which it is generated, evaluated and utilised by humans. I struggled for a long time to grasp that nature, essence and interpretation of knowledge, that it is always connected to individual people and a society they are part of. Secondly, the cross-cultural issues in teaching and learning have been difficult to grasp for me, as I was coming from a natural science background. Finally, the creation of knowledge by me and collaborators (other academics and postgraduate students) has been a complex process which is still ongoing. New challenges and re-working of modus operandi is a constant feature in my teaching and learning activities, in my academic life.

I struggled for a long time to see the way to address these challenges. However, I could not or did not want to dismiss them outright given, as there has always been a need for me to refute assumptions based on evidence and hard data only. There was always the need to gain understanding of things I did not grasp at first glance. In dealing with these challenges, I tried to follow the scientific method. The scientific method and data would provide a way disprove my original beliefs that were wrong. It would allow me to obtain a new way of understanding a subject better and grow as an academic. The scientific method, as I understand it requires one to question all assumptions of one's understanding of the world around them. It requires us to answer questions we have and use the answers to come up with new questions to ask as we move along the path to knowledge generation and dissemination. This is similar to the description of the nature of exploratory research in social science (Reiter, 2017) and exploratory research in the natural sciences (Jaeger and Halliday, 1998). I definitely think confirmatory research is present in the scientific realm, but I consider it to be a relative term as most scientific knowledge is a fluid entity. It evolves at the speed of light in the 21st century and what is ground-breaking today is often old news tomorrow.

During my journey as an academic, the way I have seen and interpreted the term *data* has been continuously re-defined to include student and my own perceptions about higher education. *Data* is connected to my interpretation about the nature of scientific reality, connected to my teaching and learning space, connected to me working with other people in the generation and dissemination of knowledge and scientific information. One of the elements in the process of learning and one's personal growth is to identify or give names to the perceptions of knowledge we have, to things we perceive to be true and to the processes through which we interpret data and engage with scientific knowledge. As a result, I thought for many years that teaching and learning were simple. Basically, there were scientific facts that were published after rigorous scientific discovery, they were peer-reviewed and often after became part of subject matter in textbooks. As such these scientific facts describe, help us interpret and ultimately are the correct representation of reality. They are true and everyone needs to perceive them the same way, or in a very similar way. Scientific facts were derived from data.

As this was "reality" in my academic career when I had started, I thought this reality was absolute and it had to be the same reality for the students' academic careers, the students I would teach or pass the knowledge onto. Background of a person had no direct relationship to the validity of scientific information and knowledge in my opinion. Data measured using the same method by different people would always be same within statistical error or range of measured/observed values. The next steps in the scientific process would be the same, i.e. interpretation of the data, data processing and then the conclusions would be the same as well, regardless of

identity of the scientist or researcher. Knowledge was seen by me as the receipt of the scientific facts by students, their dissection and personal development of subject understanding by an individual student, and then finally their internalisation and creation of the mental construct of such knowledge by the individual student. Thus I use to teach students in a “straight line”, when the subject matter and methods of scientific inquiry were delivered to the students by me. The students were presented with hard and unquestionable facts, and they had to practise established methods that led to the scientific findings. I later learned that this way of processing knowledge was a combination of transmissionist education and a version of radical constructivism (University of Buffalo, 2021; EduTech Wiki, 2014).

My reality was from a philosophical point of view looked in line with the priority principle, namely “Priority principle: We human persons have mental properties (like hoping for rain) in the primary and nonderivative sense. We think our thoughts in the primary and nonderivative sense” (Bailey, 2015, page 165). Data in my mind was always measured, perceived and interpreted in a particular way. It was characteristic of just one reality and its interpretation should be constant by all scientists in a field of specialised academic expertise. This “absolute nature” of data and derivation of facts/knowledge from that data by processing were absolute in my mind. Data and methods of science were seen by me as absolute, for my brain such interpretation of scientific data was part of me in the non-derivative sense. The way I taught was correct and if the students struggled than this would result from their lack of engagement, their lack of skills or lack of understanding of the subject matter. Additional tools to facilitate learning would be simple, e.g. frequent testing of the progress in student knowledge development, scrutiny of the measured results by me to see if the students followed the procedure correctly. I saw teaching as completed when my understanding of reality and the students’ one achieved the status of a “singularity” (Gale et al., 2020). In other words, teaching and learning were successful, if my understanding of data, scientific methods and reality converged at the same end point, as the students understanding of these terms did. The reality was the one in the postgraduate teaching and learning space.

In a way, I could say in retrospect here that I saw myself as a kind of limited fundamental epistemic authority as defined by Spaić (2013, pages 145-147), but in the realm of science not legal practice. To unpack this, the following reasoning can be provided. I showed commitment to knowledge and its generation through long-term engagement with science and academia. I succeeded and this was reflected by obtaining a PhD degree in Pharmaceutical Sciences. I then proceeded with interest to continue working in academia by doing a postdoctoral fellowship. In other words, I have paid my dues, I created new knowledge and in terms of that knowledge I was an expert...I was a fundamental epistemic authority on a scientific topic, which was limited in scope. When

I started teaching I thought I had sufficient knowledge in various biological science fields, and I desired to pass that knowledge on to students at a university. I also wanted to continue developing myself as a fundamental epistemic authority and to help students achieved the same. Based those facts and the priority principle, where I believed that scientific facts were absolute and beyond contestation, I demonstrated reason for belief (of sufficient knowledge and academic acumen) and reason for action by attempting to become and educator at a university and pass on this knowledge I possessed in the derivative sense onto the next generation (see Spaić, 2018, page 145 for the definitions).

I expected the students to take my position of a postdoctoral fellow and later academic, as a sign of status and as an “acknowledgement” that I was a limited fundamental epistemic authority on scientific knowledge in the space they interacted with me (see below for details). In my (partial) hubris, I expected the students to believe the knowledge I was transmitting to them. I motivated the students to see the science space the way I did and to see what true my way. This was beyond contestations, the scientific methods and knowledge I was teaching the students were the only way to generating their own knowledge, i.e. their theses and that they should automatically believe in my competence in science. I expected the students to assign derivative epistemic authority to me in relation to scientific knowledge, which I did not create and which I taught the students such as biological scientific methods. I thought they had to believe what I told them and act on the information I transmitted to them automatically, without contestation. In a way, my transmissionism and radical constructivism combination led to me expecting the occurrence of a true singularity, i.e. a brain capacity of my brain and the student ones would converge in the same way as that of a computer and human might (Gale et al., 2020). However, the practical picture turned out to be far more complicated.

Scientific knowledge, me and the wider community

Marbaniang states that the “philosophy of science is the study of the general nature of scientific practice, explanations, theories and the relation of scientific knowledge to philosophical issues” (2009, Available on Google books, page ii). The epistemology of science in particular will be relevant to tertiary education and postgraduate studies in particular, as it will deal with the “justifiability of the scientific methods” and the “nature and scope of scientific knowledge (Marbaniang, 2009, Available on Google books, page iii). In the developing world and in a country such as South Africa, another important element of the philosophy of science and scientific inquiry will be axiology of science. Axiology of science describes or studies the relationship between scientific knowledge and human values, or rights (Marbaniang, 2009, Available on Google books, page iii). Induction, deduction and even Peirce’s abduction (as defined and analysed by Fann, 2020, Chapters 1 and 3) can play a role in the generation of scientific information (Marbaniang, 2009, Chapter 1).

As a result, I had to evolve my understanding of the teaching and learning environment beyond the transmissionism and radical constructivist realm of a singularity. I had to start looking at the knowledge creation, e.g. in the form of postgraduate student theses, as a collaborative process. The way in which reality and its teaching/learning were executed by me had to change substantially.

Many philosophers of science and knowledge generation state that reality is often not discernible in one or another physical sense by a human being. However, higher education in South Africa does not exist in an abstract sense of reality, not in any shape of form. It lives and is interconnected with the lives of real humans, i.e. the students, the academics, the support staff and the South African society at large. Life at a university is as real as anything else that humans perceive, or rather experience on a daily basis. In South Africa, higher education should facilitate the achievement of many social functions, the pillars of the academic university's project. The primary pillars here are teaching and learning, research and community engagement (Kagisano No. 6, 2010, page 2). Part of the multi-pillar focus of the academic project in higher education in South Africa is driven by the notion that universities should not be seen as "ivory towers" that are located at a set of GPS coordinates. Rather university and higher education institution should interact with the communities they are physically embedded in or close to. A sort of integration should take of the higher education institution, i.e. it should become part of the community that is located in its geographical proximity. A collaborative relationship should develop between the community of the university and the community that surrounds it in the physical and micro-geographical sense. This collaboration will and should include exchange of ideas, and by extension will overlap with creation of knowledge.

The nature of reality can be perceived, interpreted and understood in many ways. However, the university such as Rhodes University is intertwined in the sense of reality to the existence of South Africa. Rhodes University prospers and suffers in unison with its population, with the conditions of existence of the community of the City of Makhanda, the Province of the Eastern Cape and South Africa at large. Therefore the Rhodes University's reality, and by extension the reality of the students and academics who work here or study here, are intertwined with the reality of the South African society that partially funds university, where the Rhodes University students and often academics come from. To fulfil the pillars of its mandate, a university is not to become an ivory tower that just exists in physical proximity of a community. For this to be achieved, a collaborative relationship should develop between Rhodes University and the community that it is geographically embedded in, i.e. the community of the City of Makhanda and the Province of the Eastern Cape. The reality of the community and the South African population, and the reality of the researchers and academics at Rhodes University much converge towards a singularity of sorts. Structures of teaching

and learning, structure of research and data generation, the structure of knowledge generation must reflect this. As I am part of the Rhodes University community and the larger geographical community as well, I need to be and have long ago become part of the collaborative relationship mentioned in this paragraph. Next section introduces a mechanism and principles, sociology of knowledge structures which can facilitate the development of a collaborative relationship. This mechanism was then adopted in my postgraduate teaching as routine tool for knowledge generation, sharing and dissemination.

Assemblage theory and community of practice in my teaching and learning

To achieve the convergence in the individuals' perception of realities in South Africa, to meet the pillars of a South African University's mandate, a community of practice in knowledge generation, dissemination and utilisation must be developed. This community will encompass students, academics and the community that lives in the vicinity of a higher education institution. Assemblage theory has been used to describe, study and model social interactions. The fundamental element of this theory is an *assemblage*, which can be defined as a "working arrangement" (Buchanan, 2015, page 383). In the context of this essay, the working arrangement will apply to my teaching and learning in the postgraduate space at Rhodes University, and in connected spaces. Summary of the assemblage theory by Buchanan (2015) indicates that the benefits from the assemblage are benefiting outside stakeholders (page 385). An assemblage is formed for a given purpose and there is a deliberate plan in the creation of a particular assemblage (Buchanan, 2015, page 385). In an assemblage, causality is often distributive and so the outcomes are the results of the actions of a network of individuals (Buchanan, 2015, page 385). Buchanan finally goes on to state that literature data indicates in part that there is only one reality and humans experience it differently (page 386). This concept of one reality and different perceptions of it by individuals could be applied to the context in which postgraduate students complete their degrees. The reasoning for this will be provided by the author as follows.

It can be seen in the context of science and higher education as a working arrangement and creation of space during the knowledge generation. A team of supervisor, postgraduate students, academic functionaries of the higher education and other stakeholders such as technical staff are formed for the accomplishment of each postgraduate degree. First of these goals is that the existence of the assemblage is driven by the development and generation of new knowledge. Such can be knowledge can benefit society, i.e. stakeholders outside of the assemblage, e.g. the community of Makhanda, the Eastern Cape and South Africa at large. Second of the goals of the assemblage would be personal development of the student and the career development of the academic. This is a directed and purpose-driven assemblage of individuals, who

interact and work together to achieve a particular set of goals. Thirdly, a crucial goal of the assemblage existence would be the achievement of its other goals through the interactive process, i.e. it does contain distributive causality between the input and output variables of the assemblage. Thus groups consisting of the postgraduate student, the supervisor, academic functionaries (of the higher education institution where the assemblage is formed and where it exists) and the technical staff does constitute an assemblage. Community of Makhandia, the Eastern Cape and South Africa will be connected to this assemblage indirectly through the settings in which the research project takes place. They will also be a great resource to communicate with members of the assemblage about the research topics and questions, which are local in nature, urgent in the need to be solved and pertinent to the common reality of the existence of Rhodes University and the communities it is embedded in.

To achieve the assemblage goals, the assemblage participants will need to be involved in certain cognitive processes, they will have to utilise their skills and develop new ones and they will have to work through trans-cultural boundaries in a country like South Africa, where multiple ethnic groups make up the population and where they interact in everyday life, including scientific knowledge creation at higher education institutions. Cultural values of the students and academics will come into play. Multi-cultural assemblages can be expected in the development of the knowledge in South Africa. The assemblage in South Africa will be multi-cultural in nature and it will have to respect multiple backgrounds, varying types of skills and multiple ways of knowing. In the teaching and learning process, a balance must be struck between individual's "*Cogito, ergo sum*, i.e. I think that's why I am (Stanford Encyclopedia of Philosophy, 1997-2019) and the social ways of knowing.

As academics at tertiary level of education, we are adult educators and we just practise Andragogy, i.e. the education of adult learners. Határ (2012, pages 7-9) builds on the Hasselman's definition of Andragogy. According to this definition, an educator should interact with students at tertiary level through helping and assisting them. Therefore the educator should be supportive through the (self-)education and (self-)development of the adult learner (Határ, 2012, pages 7-9). Such support and tertiary education should be multi-pronged and multi-dimensional in relation to various life situations. It should play a crucial role in the self-education, continuing professional development and self-development of the adult learner (Határ, 2012, pages 7-9). In other words, tertiary education should be seen as voluntary and driven to some extent by the self-interest of the adult learner, with the academic and Andragogy playing a supporting role in the achievement of the adult learner goals. This would indicate a need for collaborative nature for the tertiary education, i.e. a type of an assemblage forming for the purposes of educating postgraduate students.

Universities are today intricately integrated into their immediate surroundings (Pavlov, 2014). They also carry a community engagement or civic engagement as part of their mandate to assist and uplift communities they are embedded in (Pavlov, 2014). One of the ways that this mandate of tertiary institutions can be carried out is through conducting research which addresses the immediate and pressing concerns of the country and geographical location, where a particular university is found. In the context of my academic and teaching career at tertiary level, research into water, sanitation and hygiene (WASH) in South Africa and water quality in South Africa have been examples of such endeavours (Whittington-Jones et al., 2011). Since my arrival in South Africa research has shifted from inside to outside, or from a lab rat I became a partial lab mouse. I will try to demonstrate part of this process in my essay.

Határ (2012, page 10) states that Andragogy in the present day entails social education and awareness, as well as professional education of adult learners. I would in my experience interpret this to mean that Andragogy is a multi-faced area of academic endeavour, which requires an academic to master a combination of educational theories and their application to local problems, conditions and educational settings. In this way, the adult learners as partners of academics on the journey to knowledge generation can be most productive during their educational activities and self-participation in them. They can be provided and embedded in the most stimulating environment, where they thrive from an educational point of view.

Social Andragogy entails adult education which can be examined or be looked through the lens of sociology of knowledge, i.e. the systems which exist in a society for production, propagation/spread in the public and scientific domain and the ownership, exploitation and reaping of benefits of knowledge (my interpretation of text on page 17, Határ, 2012). Systems of sociology of knowledge and their shifting or fluid, ever-adapting nature would also form part of social Andragogy (my further interpretation of text on page 17, Határ, 2012). Education of any and all learners does not take place in vacuum, it is not transmissionist in nature...not in the present day anyway (Pavlov, 2014). Generation of knowledge, its ownership and propagation, its beneficitation in a society will and does depend on the interaction between stakeholders in the system of knowledge generation (Ulewicz, 2017).

To continue the discussion and analysis, social andragogy and the role of the academic in it will be linked to understanding of the social factors that an individual faces in terms of their participation in the system of knowledge generation (Petrová and Duchovičová, 2016). In addition, micro-anthropological dimension or the role of the other stakeholders, who accompany an adult learner on their journey through the knowledge generation system, must be kept in mind and form a strong part of the practice of teaching and learning at tertiary level of education, in adult education. The interactions between the adult learners such as postgraduate students and adult educators, e.g. academics such

as me, can be viewed as a micro-system for creation of knowledge, its development and dissemination. It is an assemblage in the context of a specific purpose, e.g. completing a postgraduate thesis or completion of a funded project.

During the tertiary education process, an academic must work constructively with the adult learners to help them master the vocabulary of a particular field of academic endeavour (Petrová and Duchovičová, 2016). The academic is also obliged to introduce the adult learner to the methods of knowledge generation in a particular academic field, e.g. the WASH and water quality monitoring tools, which can be used in the environment of limited resources in South Africa (Whittington-Jones et al., 2011; Malema et al., 2019; Tandlich, 2020). Through the introduction, transmission, construction and adaptation, and internalisation of the knowledge by the adult learner, the academic must take the student from the introduction to the methods of an academic field to their practical application. This application should be done inside the sociology of knowledge relevant to the context of an adult learner, i.e. the systems of knowledge that the learner is familiar with, that they are part of and that they will use in the professional career, should be the primary site of Andragogical activities at tertiary level of education (Határ, 2012). Assemblage formed for a particular academic purpose, e.g. completion of a postgraduate thesis, is a micro-system in the sociology of knowledge because one of its functions is to master the vocabulary and methodologies for data and knowledge generation in a specific area of academic endeavour.

According to further thoughts by Határ (2012, furthermore my interpretation), the social andragogical practice must include a combination of theory and practice from an academic field. The teaching and learning of methodology from a particular academic field must be complemented by practical application in known settings, e.g. laboratory practicals, and then in the generation of new knowledge. At the same time, as I have learned throughout my academic career at Rhodes University, it is also part of the scientific method to value the opinions of your colleagues and the opinions of students. It is necessary for a system of knowledge generation must provide for the exchange of opinions and information, a pluralistic construction of knowledge of all assemblage stakeholders.

In my view, a community of practice is a good technique to allow academics and students to get most of each other's professional expertise. In education and higher education in particular, it is kind of a learning community that allows academics and students to absorb existing knowledge and to create new knowledge and skills. Over the years and after making many mistakes and errors in judgement, I believe I have finally developed the ability to listen and take on board/consult opinions of my academic colleagues and postgraduate students. This I believe has been the main personal and academic transformation since I joined Rhodes University as a postdoctoral fellowship in early 2006. I have adopted and put at the centre of my academic endeavours a cooperative approach to research and generation of new knowledge.

Beginning of the community of practice, assemblage in teaching and learning

In late 2005, I started looking for a new challenge and wanted to return to the academic environment after spending some time in the pharmaceutical industry. After about three months of looking, one of the email applications I have sent out came back with a positive response and contained an opportunity I was interested in. This was from researcher at Rhodes University, who was looking for a postdoctoral fellow and a laboratory manager to replace an outgoing collaborator. I had never considered coming to the Southern hemisphere, not to mention South Africa which was not even on my radar of potential work places. However, the opportunity to return to wastewater treatment and to learn new things from a field I did my Master of Science thesis in, was tempting.

My further correspondence went on and an application was put together for a National Research Foundation of South Africa (NRF) a postdoctoral fellowship for me. The application was chosen by Rhodes University among three to pass on for consideration by the NRF. As usual NRF took its time, but there was interest for me to get me down to South Africa as soon as possible. Thus I arrived in Grahamstown and at Rhodes University at the end of February 2006. Second day in the country, namely 1st March 2006, I was thrown into the deep end of working in South Africa. Laboratory introduction and the administrative background were completed by the morning tea time. The role I signed up for proved to be far more challenging and complex than I originally thought. My first official day at work was like hitting a wall head on at 200 kilometres per hour.

When I walked into the laboratory of new research group, I was introduced to the person I was going to replace. This was the outgoing postdoctoral fellow and laboratory manager who had decided to head back to her home country with their family. My boss, Rhodes University researcher and the outgoing postdoctoral fellow walked me through the laboratory, the individual projects/research which were ongoing on and the extramural tasks of community analyses of water samples that I would be responsible for. The initial walk through everything felt like I was back in the first year of undergraduate studies at the Slovak University of Technology in Bratislava, Slovakia and was overwhelming. I realised that I had to “hit the books hard again” to find out among other things what exactly total coliforms were and how to measure their concentration in water samples.

Keyword here being MacConckey agar.....I had never even heard of up to that point and I was surprised that “faecal coliforms” might have been so significant in a research group, the second keyword which will become important in the creation of my academic community of practice. The third keyword was diversity of research topics and people. There was sorption as one of the topics in the research group that I was familiar with,

but not in the context of mixed wastes such as mining effluent. The fourth and final keyword of the first day on the job was greywater. I knew about domestic wastewater in broad terms, but I had no idea that such “everyday research topic” like greywater would become the core of my research activities at Rhodes University for many years, once I was hired in a full-time capacity.

By the time the second-day excursion was done, I was lost in South Africa and not sure if I would survive the first three months. In the next few days, I began to familiarise myself with professional things at Rhodes University and outside my research group and laboratory. Among others, I got a tour of some of the other facilities in the Department of Biochemistry, Microbiology and Biotechnology where the research group was located at that time. Nothing was familiar to me, until finally on the top floor of the building I saw an old gas chromatograph. This was significant, because until then the focus of my expertise and professional development had changed multiple times, but one constant remained....gas chromatography. As a versatile technique, I had worked with it in Slovakia during my undergraduate and Master studies; and in the USA during my PhD studies. In South Africa, it would become the oasis I could escape to when things got tough, the source of my grey hair when it refused to “budge or behave”. One of the first Bachelor of Science (BSc) Honours’ projects I co-supervised at Rhodes University happened through this old HP-5890 gas chromatograph. At the same time, this gas chromatography facilitated meeting one of the best collaborators and colleagues I have had to this day at Rhodes University. This collaborator has since then played an important role in my “community of practice” that is the basis and driving force of my teaching and research at Rhodes University at the postgraduate level. They have been part of assemblages I would help constitute in the course of many projects to come in my postgraduate teaching and learning at Rhodes University.

After the first few weeks in my new job, I settled in and started my routine which has not changed much to this day. I hit the books to familiarise myself with the basics of all colorimetric methods that were used in the new laboratory and research group I was part of. Until I came to South Africa, the Lambert-Beer law which governs quantitative analyses in colorimetry and UV/VIS spectrophotometry had been on my radar, but I did not care much about it as it has not played a central role in my research activities. This proved to change very quickly as it was the basis of majority of the experimental and analytical work done in the research group, depended on it. It might have felt silly at time, but the fact that the Lambert-Beer law became the focus on many of my daily activities proved to be of significant importance in my future career at Rhodes University. This was troubleshooting which I had to get involved about a month and a half into my new job. The problem in question originated from various issues that were identified by myself and by some of the postgraduate students with the data produced in the Lambert-Beer law measurements.

The supplier that most of the instrumentation and consumables were purchased from could not explain to anyone in the research group, me or the postgraduate students why the calibration of their pre-calibrated spectrophotometer purchased in 2005 was not working optimally (Merck Corporation, 2017). This was a single-beam spectrophotometer which is one of the cheapest on the South African market with a price tag of about 25000-30000 ZAR (about 2000 USD). This had made it popular with research laboratories in academic institutions and industry where basic water research and analyses are conducted. Besides its price, one other practical advantage is the fact that it is marketed as a “factory-calibration” instrument, i.e. the calibration data come stored in the instrument when it is delivered to the customer ready to use (Merck Corporation, 2017). Similar instruments are available from several other suppliers (Hach, 2017; Aqualytic.de, undated).

The basic premise of this instrument configuration is that the customer purchases a versatile and easy-to-operate instrument which the supplier has calibrated for a wide-range of analytical methods (Merck Corporation, 2017). Therefore once purchased by a customer’s laboratory, the “factory calibration” stored in the instrument should allow a standard research and academic laboratory to accurately and precisely quantify the concentrations of water quality parameters that indicate the efficiency of water and wastewater treatment. In theory and if the calibrations really meet the manufacturer’s specifications, then the spectrophotometer can increase the number of samples a student or trained operator can process during a standard working day in a laboratory at the minimum cost. The decrease in costs is that calibration must be performed only infrequently, e.g. twice a year, without compromising the accuracy of analyses. The other massive advantage of the single-beam and easy-to-use spectrophotometer is that training is simple and takes about 1 day, after which a Bachelor of Science/Pharmacy Honours level student could start working with it independently and produce reliable results. However, the spectrophotometer that was in the research group I was part of in early 2006 was not performing optimally for the water-quality parameters it was used to quantify.

I will illustrate this with the following example. In April 2006, two Bachelor of Science in Honours students were starting their projects and required training on the spectrophotometer. While working with these two students, we attempted to quantify concentrations of ammonium and the chemical oxygen demand (COD); and other parameters in model wastewater samples. The spectrophotometer we used provided highly variable and irreproducible results. I trained the students properly and I had by then mastered the instrument myself. Subsequently, I oversaw the work of the two Honours students, examined the instrument and interviewed the students, once they first reported problems to me. I could not figure out what was wrong as the investigation into the cause of the results yielded the following findings. The instrument did not suffer from any technical faults, no parts had to be serviced and both Honours students followed the correct procedures. Thus the problem had to lie elsewhere.

I started working on figuring out the exact cause of the problem. The community of practice I was unknowingly building played a crucial role in figuring out the answer. Concurrently with hitting the books on the cause of the problem, I spoke to my boss about the history of the instrument, to the technical staff in the Department of Biochemistry, Microbiology and Biotechnology and postgraduate students from the research group I was part of. An assemblage was formed for the solution of this problem. Several potential causes of the unreliable analytical results were identified and so I analysed some calibration solutions for reference. The ultimate cause was quality assurance of the single-beam spectrophotometer and the calibration procedure in particular. This indicated that the quality assurance and calibration procedures stated by the supplier were out of date; and novel ones had to be developed. An assemblage was created for the solution of a problem that would have fundamental implications for the quality of the scientific data measured and the scientific knowledge produced in the research group I was part of.

Quality assurance is a concept which describes a set of procedures that need to be followed and adhered to guarantee reliability of results in analytical chemistry and consistency in manufacturing of pharmaceutical products (AAFP, 2017). All the investigations led to the identification of one fundamental cause of the variable spectrophotometer results. If not addressed urgently, this problem could have had wide ranging implication and could have invalidated all future research findings in the research group I was part of. Service records on the spectrophotometer we had from late 2005 indicated that the problem was new and it only occurred first after the previous re-calibration and service at the manufacturer's facilities around November 2005. No new students' data collection had taken place between the last instrument service on the spectrophotometer and when the calibration problem was identified. I spoke to assemblage members about the results of the team's investigation into the spectrophotometer problem, the team, as I was not the only one who contributed. We agreed that I should devise a strategy to address the problem as a top priority, to work with all the postgraduate students in addressing the problem and to keep the boss updated. Technical staff and the postgraduate students, who were part of the assemblage...the community of practice, were also to be kept in the loop.

I started by consulting the postgraduate students and the lists of potential interferences provided by the manufacturer; and interferences documented in the reference literature as having potential influence on the measurement of the water quality parameters (e.g. US EPA, 1993). If the concentrations of interferences, e.g. chlorides in the COD method (Environmental Express, 2017), were high enough, then they could influence the spectrophotometer readings due to cross-reactivity (Environmental Express, 2017). The COD values were influenced by this problem and so a new calibration procedure was devised. Here MilliQ water (Millipore/Merc, Port Elizabeth, South Africa) was replaced

as the solvent in the preparation of the COD calibration solutions with aqueous solution of sodium chloride with the weight concentration of 1000 mg/L. In this way, part of the calibration and quality assurance problems with the spectrophotometer was solved. The nature of the calibration solution was changed and interferences were eliminated as the cause of the quality assurance problems with the COD measurement using the spectrophotometer in the research group I was part of. Unfortunately, the COD were not the only cause of the variable results of other assays, e.g. the measurement of the phosphate concentration in effluent samples, even after the interferences' problem was addressed.

Therefore an additional problem had to be addressed to provide a guarantee that the spectrophotometer I worked with the provided results and the data that the postgraduate students could put in their theses and publish in subsidy-earning journals. The urgency of the solution was demonstrated by the fact that I myself was involved in co-supervision of one PhD student and two BSc Honours students. The solution to the second problem was found by the cooperation inside my community of practice/the assemblage under consideration. The calibration of the instrument did not hold for the wastewater samples that were being analysed in the context of the projects in the research group I was part of. Fresh calibration solutions were prepared with each batch of samples.

Practically, this meant that when an experiment was about to start, the scientist/assemblage member running it would prepare a fresh batch of calibration solutions and read their signals against the signals provided by the spectrophotometer instrument. The correlation would then be established to determine the degree of agreement. During the individual experiments, when actual samples were run, the scientist running them would run control samples. With control samples and the new calibration, mid-level of the calibration curve prepared by the scientist in question before the start and during the experiment would be analysed with each set of samples (Zuma et al., 2009; Tandlich et al., 2009). If the control sample signals were within the limits set in the control charts, then all samples in that set could be analysed without delay. If the reading for the control sample fell outside of the control limits, then re-calibration was required.

The efforts I participated in as a part of community of practice had practical impacts on the work and research conducted in the research group I was part and the assemblage which formed to solve the spectrophotometer problem. These include the following achievements: one successful presentation at an international conference on wastewater treatment (Melamane et al., 2006) and the increased number of publications for the PhD student (Melamane et al., 2007a-d). The knowledge I gained through the active engagement with the analytical techniques and the members of my then community of practice, was also incorporated into the laboratory work of two Bachelor of Science

Honours in Biotechnology from the research group. This in turn contributed to the publication of two-subsidy earning journal articles for one of the BSc Honours students (Tandlich et al., 2009; Zuma et al., 2009). I have completed the 2006 academic year with three successful co-supervisions under my belt.

The community of practice that was created in the example above follows the general principles of the learning community as described for teachers' education by Vescio et al. (2008). In education in a learning community or community of practice, knowledge is generated, transferred and shared among various practitioners; and it is mostly derived from the day-to-day educational activities (Buyse et al., 2003). This fits to the activities that took place in the solution of the quality assurance problem I discussed above. The practitioners or assemblage members included myself, my boss/senior academic, the postgraduate students who used the instrument in their projects and the technical staff from the Department of Biochemistry, Microbiology and Biotechnology. Here this group of people became a learning community/community of practice that adapted existing knowledge and generated new knowledge through a collaborative effort. This led to the solution to "active engagement" of the community of practice with the knowledge and its implications in terms of real life problems. Publications on greywater treatment by Zuma et al. (2009) and Tandlich et al. (2009) indicate that professionals such as myself and the postgraduate students learnt from this experience and improved their understanding applicable to their professional field.

The solution of the spectrophotometer issue demonstrated the assemblage came together and it applied its cognitive functions, namely application of the knowledge of the Lambert-Beer law and the tracing of the problems/errors in an analytical system, distinguishing between various sources and the analysis of the impact of various factors on the measurement outcome, and creation of new knowledge by identification of the problem with the spectrophotometer measurement. This is in line with the cognitive categorisation of the assemblage as outlined in the revised of Bloom's taxonomy (see <http://docplayer.net/38534090-Pomocka-pre-formulaciu-specificickych-cielov-a-ucebnnych-uloh-prehľad-taxonomii-kategorie-taxonomii.html> for details). The common efforts to solve the spectrophotometer problem have also demonstrated a collaborative and organised and creative efforts of the assemblage members, as outlined in the Kratwohl's taxonomy of affective functions of the assemblage members (see <http://docplayer.net/38534090-Pomocka-pre-formulaciu-specificickych-cielov-a-ucebnnych-uloh-prehľad-taxonomii-kategorie-taxonomii.html> for details). Manipulation of the calibration solutions and other steps taken by the assemblage/community of practice in terms of the spectrophotometer problem show the application of the skills of the assemblage members to solve the problem (see <http://docplayer.net/38534090-Pomocka-pre-formulaciu-specificickych-cielov-a-ucebnnych-uloh-prehľad-taxonomii-kategorie-taxonomii.html> for details).

In the research group I was now part of, each project was planned in regular meetings between the senior academic and the respective postgraduate student. With students I was co-supervising, I sat in on these meetings. In these meetings, experiments and tasks the students had to complete during the coming week were planned and results from completed experiments were discussed. Between two meetings, I was then responsible for overseeing the execution of individual experiments by each student I was co-supervising. During that time, I tried the hand-on approach and some postgraduate students struggled with this attitude. Hands-on means the combination of the transmissionist and radical constructivism. Besides co-supervising three students, I also had to assist all postgraduate students in the research group with ordering of research consumables and with fixing instrumental problems. With the students I was co-supervising, both the students and I felt a sense of ownership of the projects we collaborated on. When it came to the rest of the postgraduate student projects, I felt a sense of being part of the solution which was sometimes accepted and sometimes not. Some students did not share my views and communication problems started to occur. I tried to manage the situation as best as I could by using a "feedback loop". There was no singularity between mine and the students' opinions of the scientific reality.

To mitigate the impacts of the spectrophotometer problems, before any experiment was supposed to begin, a meeting between the senior academic, me and the postgraduate student in question took place. Besides planning, the student was instructed to read some articles and familiarise themselves with novel experimental techniques which the student might not have used up to that point. A sequence of steps in a particular experiment was then discussed. These tasks were the responsibility of the student to complete and I assisted where necessary with minor issues or queries; and planning/setting up of experiments to be run. On the morning before a particular experiment was then supposed to begin, I met with the postgraduate student in question and touched base with them. After initial problems, it turned out that the best approach was to draft standard operating procedures (SOPs) for the basic operations. This meant that if the student was running a particular experiment, we drafted a detailed procedure together. The procedure, i.e. SOP, was a way to break down an experimental procedure into individual steps or basic operations. This is a standard way of conducting unit operations in chemical, biotechnological and pharmaceutical industry.

If adhered to without exception, such approach allows the researcher to trace the sources of discrepancies, which might occur in the process and trouble-shooting becomes more manageable (Patel and Chotai, 2011). Exchange of opinions between members of the assemblage led to the mitigation of problems and development of new knowledge. After realising the feedback loop was not working, I started to take a step back, to listen and try to accommodate people as necessary. The assemblage grew in

scope and number of voices which were taken into consideration in the generation of new knowledge. I gave up on my transmissionism and radical constructivism approach to teaching and learning in the postgraduate realm. I became a collaborator, a member of the community of practice in chemical analysis/water analysis and biotechnology. The transmissionism and radical constructivism approach was transformed to an assemblage or a community of practice.

The community of practice was strengthened here through the use of students' own experiences in their projects and through my assistance. Too little supervision has been shown to fuel discontent and disengagement of the supervisees, i.e. the postgraduate students in the case discussed here (Nissly et al., 2005). Assistance was always welcome by all postgraduate students, regardless of whether I co-supervised them or not. The communication between myself and the postgraduate students started to become problematic probably when the point was reached that their community of practice started being one-sided and they might not have been equal or useful members of this community anymore. As a result, the dynamics in the assemblage and the research group was altered and my function was changed. This took place after mutual agreement between all parties. The ordering of consumables and other laboratory manager duties were still carried out by me as before. Postgraduate students were empowered to take the initiative and drive the process of requesting what needed to be ordered. I continued to co-supervise all students that I was involved with their projects before. However, I assisted only hands-on, if this was requested by a particular postgraduate student.

Going forward in my academic career, I learnt that communities of practice were dynamic structures which are always in a state of flux. Assemblages that were formed to carry out particular projects had a permeable boundary, i.e. members of the assemblage could enter and leave the assemblage upon need and possibly return is necessary. A constant communication and feedback loop between all its members is required to achieve the necessary level of flexibility and ability to react to rapidly arising problems and changes in the academic/work environment. Through the communication and constant exchange of information epistemic justice was strengthened inside the assemblage. The postgraduate students had their voices heard and could be active participants in the knowledge generation. Their values, skills and cognitive processes were part of process of generating knowledge. A state of singularity was reached when the postgraduate students finished their degrees. However, instead of the "computer like singularity" view...a convergence of communication and co-authorship of knowledge were reached. The knowledge that formed art of the final theses of the students in question, was generated through input from all assemblage members, i.e. it was the result of distributive causality.

Taking this lesson on board, I had to shift the next stage in my academic career. It became clear that it was necessary for me to work in an environment with more independence, where I would be (at least) partly in charge of my research path. The part of working with other people was great and very beneficial to my career, but I had more research ideas of my own, which needed to be developed. This was necessary so that I could interrogate and decide independently which career path to take and which research topics to focus on. At the same time, my next assignment should provide me with the ability to continue being part of a community of practice in the areas of water research and related research topics. This arrangement would play to my strengths and also allow me to assist potential collaborators when requested and in the most efficient way. Therefore I moved from Department of Biochemistry, Microbiology and Biotechnology to the Institute for Water Research (IWR) to continue my postdoctoral fellowship in 2007. I left the assemblage I was originally part in South Africa and helped form a new one. Singularity of opinions was not necessarily achieved, not on a permanent basis anyway. However, knowledge was created and shared within the assemblage, i.e. within the community of practice.

Community of practice 2.0

At IWR, I became involved in research in water toxicology and the faecal contamination of potable water supplied in Makhanda local government to its residents. Building on the skills I acquired in the 2006 research group, I helped adopt a method for the quantification of sulphate concentrations in water and wastewater by adopting and modifying an existing protocol (US EPA, 1978) to the instrumentation available at IWR. This provided a better understanding of the water quality at study sites of IWR and facilitated improved understanding of the links between environmental water quality and river health assessments that were ongoing at IWR at the time. In the context of this work, I continued working closely with one of the former Honours students in co-supervised in 2006.

My collaboration with this postgraduate student is clear from the articles we have co-authored and that I have been citing and will be citing in this essay. Our professional association and collaboration has been ongoing for 15 years (as demonstrated by Zuma et al., 2009). I have come to rely on this collaborator's advice, knowledge and research excellence in my previous and ongoing research projects and supervision of postgraduate students. Therefore I feel that the obvious nature of my research association with this colleague and other members of my community of practice in postgraduate and teaching set aside all ethical implications justify me discussing our collaboration in this essay or autoethnography. In 2007 at IWR, I assisted my colleague with getting their experimental techniques of the ground for their Master of Science project on microbial water quality in the Eastern Cape Province of South Africa. We

have exchanged ideas about the various techniques we both used. My colleague tested the sulphate method that I have adopted and mentioned in the previous paragraph.

Collaboration of this student and me overlapped with our active involvement in the community engagement activities around water quality in Makhanda throughout 2007. Through this interest, we became acquainted with a pupil from one of the local high schools in Makhanda. That pupil was working on a water quality project for the 2007 Eskom Expo for Young Scientists. The project was entitled: Towards conservation of purified water. Data on chemical and microbiological quality of greywater was gathered in the Eastern parts of the Grahamstown area of Makana. Questionnaires have been distributed among the local business community and members of the public to ascertain their attitudes to the reuse of greywater in improving the sustainability of the potable water use in Makana. The project results were presented as a poster at the 2007 Eskom Expo for Young Scientists. The pupil in question won the Gold medal at the Regional Expo in Grahamstown in July 2007. The pupil qualified to participate in the National Expo, where he was awarded the bronze medal, for ranking among the top 10 % of the participants at the event.

As Science Expo project, it was not just another poster which ended up giving the pupil a one year scholarship to study at Rhodes University. However, the study went further and it resulted in a peer-reviewed conference proceedings publication (Tandlich et al., 2008). The study started with water quality data collection on greywater composition and risks associated with its reuse in Grahamstown and Makana at large. At the same time, it was one of the first fairly systematic studies that examined the population's attitude to the reuse of greywater in irrigation, toilet flushing and similar applications in South Africa. The pupil, under guidance from my colleague and myself, collected this data in the Eastern part of Grahamstown, which is today's Makhanda. An assemblage grew out of this pupil's project and I assisted with microbial and chemical analyses, preparation of the pupil's poster and writing up of the article.

The study and the publication of the results at an international conference demonstrated what can be achieved through an efficient community of practice. This community consisted of four authors on the study. The high school pupil had the original idea and communicated this to my colleague, who provided guidance on the scientific design of the study. A PhD student at IWR at the time, provided help with guiding the student through the sample collection and assisted with logistics. For myself, I assisted with elements stated in the previous paragraph and I also took the lead in writing up the scientific and peer-reviewed publication (Tandlich et al., 2008). I was designated as the first author due to taking the lead in the writing up of the publication and after mutual agreement with the other co-authors. The success of this community of practice was that its parameters and limits; and internal communication pathways were clear to all

participants from the beginning and throughout the entire process of completing the study in question.

The pupil got a scholarship to Rhodes University and started in the Foundation phase of a Bachelor of Science degree in 2009. The assemblage from the water quality project in 2007-2008 continued as all of us became the pupil's mentors, now a Rhodes University undergraduate student's mentor in academic matters and I provided assistance with mentoring and financial support for the student, as his scholarship was only partial. The community of practice from the pupil's project remained pretty much intact, but its focus had shifted slightly. This new focus of the community of practice worked to a limited extent. All living and everyday issues that the student faced, were addressed and myself and the members of the assemblage which was now more the community of practice. This experience had a profound impact on my future supervision of postgraduate students and community of practice in teaching and learning. I decided that in my community of practice I would adhere to the following principles from then onwards: I would empower the students as much as possible to take ownership of their project, I would keep a close eye on financial background, i.e. is there a scholarship in place and if not what can be done to address it, and I would rely on a combination of self-reporting and seeking information from postgraduate students first-hand without giving an impression of micro-management. The implementation of this approach started in 2009 and 2010 when I started supervising postgraduate students as the primary supervisor. Implementation with successes and problems are listed in the next section.

The IWR year showed that the assemblage on water quality testing was formed and some of its members were from previous assemblage on the 2006 spectrophotometer problem and the 2006 as a whole year. Two members of the assemblage were the same, and two were new members. The purpose of the IWR assemblage was partially the same, i.e. scientific research and in part postgraduate teaching and learning, and in part different, i.e. community engagement in water quality. The assemblage or community of practice I was a member of, was permeable and had outside benefits in the presentation of the results at an international conference and it also provided for engagement of water testing between the assemblage and the wider Makhanda community. The publication of a scientific publication by a high school pupil on board as a co-author could be interpreted as a singularity occurrence and convergence of the perception of realities among the assemblage members.

Community of practice 3.0

In 2009 and 2010, two PhD students started working under my supervision in the Faculty of Pharmacy at Rhodes University. Their projects focused on greywater treatment and tracing faecal contamination of surface water in the Eastern Cape Province of South

Africa. In the context of this collaboration, the assemblages had three members and that community of practice was then called the Environmental Health Biotechnology Research Group in the Faculty of Pharmacy at Rhodes University (EHB). There was continuity with the community of practice 2.0, in that two members were the same and one was new. The former Honours student, who had by then completed their Master of Science degree, used our previous collaboration as the foundation of their PhD dissertation and its topic. The original system for greywater treatment, which we had developed and published on (Zuma et al., 2009; Tandlich et al., 2009), was a simple system to be built anywhere as needed and that could provide treatment of greywater and eliminate any potential public health risks in the absence of reticulation (Zuma et al., 2009). The system provided some treatment of the greywater in the laboratory, but it did not remove the pathogenic microorganisms from greywater (Zuma et al., 2009). At the time, that colleague started their PhD the system was scaled-up and installed in the Buffalo City Municipality and was tested in an un-reticulated area (Whittington-Jones et al., 2011). This became the first tasks of their PhD, namely to test the efficiency of treatment on-site of the scaled up system and to provide advice/solutions were necessary.

With my assistance and collaboration with other co-authors, the assemblage member completed this part of their PhD on time. Results were published, but the student went further. He took the initiative and communicated with the residents where the greywater treatment systems were installed. It became clear that the municipal officials were not doing site visits to investigate, if any faults occurred in the mulch towers (Whittington-Jones et al., 2011). With my assistance with one of the site visits, it was also established that the greywater treatment systems were not installed properly and two layers were completely missing at some houses (Whittington-Jones et al., 2011). Technical expertise of the municipal officials became an issue and sustainability of the project did as well. This led to open pools of greywater and lack of its treatment in the vicinity of the houses. The project eventually became defunct (Whittington-Jones et al., 2011). The PhD student took the initiative and started looking into the potential causes of the observations we made in the Buffalo City.

Through policy analysis and extensive literature survey, two main and likely causes of our observations were identified. Firstly, there was a lack of technical expertise in the sanitation sector was an endemic problem throughout South Africa (Whittington-Jones et al., 2011; Hoossein et al., 2014; 2016). At the same time, financial mechanisms which were available to local government were too constrained to provide efficient relief and funds where needed (Whittington-Jones et al., 2011). This finding and a revelation to be honest launched a new angle in the research that the two assemblage members that were the same between the community of practice 2.0 and the community of practice 3.0 have been involved in. This is disaster management and the application of its principle to water and sanitation in South Africa. Over the next few years, the EHB

conducted research on the application of the mechanism and sense of urgency for action that are natural to the field of disaster management through various projects. From those efforts, articles about the sanitation challenges in South Africa and the potential use of disaster management tools and the potential solutions to sanitation and related challenges in South Africa (Hoossein et al., 2014; 2016).

In the context of the second PhD project which started in 2009-2010, a method for the tracking of faecal contamination in surface water based on bifidobacteria was developed and influence of environmental factors was assessed (Luyt, 2009-2013; Luyt et al., 2013; Luyt et al., 2015). The PhD was successfully completed and there was also a beneficial side-effect. An existing tool for faecal contamination detection, i.e. the H₂S test kit, was modified from the published data and the sensitivity improved to match that of standard indicator microorganisms (Luyt, 2009-2013; Luyt et al., 2011; Tandlich et al., 2014). A standard procedure was developed for the preparation and use of the H₂S test kit; and the use has been expanded beyond the laboratory settings to include community one (e.g. Tandlich et al., 2014; Nqowana, 2017-2019) and the educational journal publications (Nhokodi et al., 2016; Nqowana, 2017-2019). This took place beyond the original scope of the two PhD projects. At the same time, disaster management became a core component of other postgraduate research projects I supervised or co-supervised. I have gained one person who has been a member most partial of the assemblages on all projects that I have been involved in postgraduate teaching and learning. There have been others over the years (Luyt et al., 2012; Tandlich et al., 2013-2014; Collings et al., 2016; Malema et al., 2019).

The EHB was the macro-assemblage and the projects inside it formed parts of it, i.e. they were micro-assemblages. Since 2009-2010, I have been blessed to work with many postgraduate students and many collaborators. Many micro-assemblages have been created inside the EHB macro-assemblage and led to the completion many postgraduate research projects. The geographical scope was expanded to include countries outside of South Africa (Chirenda et al., 2015; Angala et al., 2019). Individual micro-assemblages and community of practice has fulfilled many purposes, e.g. achievement of many postgraduate degrees, novel knowledge has been produced in an environment where various voices are heard and respected, where the cognitive abilities, skills and values/cultural background of all members of the assemblages are respected and provided space to be expressed. Creation of knowledge was accomplished through the combination of students' abilities and my input from the supervisory and collaboration point of view. Thus the knowledge was created through a distributive agency and the micro-assemblages were formed inside EHB for purpose of achieving production of new knowledge.

The EHB macro-assemblage had side-effects such as the H₂S test kit which continues to have impact on the community around Makhanda and beyond. Given this background,

the EHB as a macro-assemblage has acted an agency for the production of knowledge, in teaching and research at the postgraduate level, and also there have been “spill-overs” into the dimension of community engagement (see <https://www.ru.ac.za/latestnews/communityengagementchampionsawardedatfirstvirtualruceawards.html> for details in the category of the Student researcher of the year; and also see <https://www.ru.ac.za/latestnews/archives/2019/environmentalchampionshonoured.html> for the EHB Rhodes University Environmental Award). Based on these facts and the distributive agency of the EHB macro-assemblage, this community of practice contributed to the fulfilment of the three pillars of the Rhodes University mandate, as a higher education institute in South Africa. Through the accomplishment of those three pillars, the EHB assemblage and its micro-assemblages have been constituted and developed into the fundamental epistemic authorities in the context of the purpose of their constitution. The members of the assemblage/community of practice then hold the derivative epistemic authority towards each other and towards stakeholder outside of the assemblage, while they are members of the assemblage.

The permeable boundary of the EHB macro-assemblage has allowed consecutive members of this community of practice to enter the platform, participate in the creation of micro-assemblages and the distributive agency has resulted in the growth of the research group. Micro-assemblages inside EHB have to the development of the new research directions beyond the original focus on water quality and sanitation (Vumazonke et al., 2020; Farounbi and Ngqwala, 2021). There have been several core members, who I still work with closely and who have maintained continuity of fundamental epistemic authority inside the EHB, the macro-assemblage. There have been other members that have entered the macro-assemblage for a period of time through the assemblage’s permeable barrier. These members have been sources of enrichment for me and other members of the community of practice. They have become part of the fundamental epistemic authority on the subject at hand, after first accepting the derivative epistemic authority of the assemblage at hand (Nqowana, 2017-2019). They have been carriers of this authority outside the original intellectual space after leaving the EHB macro-assemblage. Each postgraduate student had, after graduation, become a holder of limited fundamental epistemic authority which had been created in the context of a micro-assemblage inside the EHB macro-assemblage, inside the community of practice.

Community of practice 4.0 and considerations beyond

My personal journey throughout the community of practice versions up to 3.0 has been transformative in creating new knowledge, creating my personal awareness about the cultural differences and ultimately creating a source of fundamental and derivative epistemic authority in the space of various research topics. The “brute” focus on the natural science as the basis for knowledge generation from 2006 was transformed into an integration into the consideration for various opinions from multiple stakeholders. I

will illustrate my transition, as I see it from an auto-ethnographic angle, on the example of water treatment below.

The transmissionist assumption that “what I do as teacher should be my focus” was originally correct when I arrived in South Africa in 2006. Today I see it mostly as applicable only in the context of the teaching of practical and relatively manual skills that postgraduate students must master to be able to carry out their professional research activities. The original procedure I started in 2006 and which I began this article with, that procedure which I thought was the scientific method was a combination of transmissionist education and had some elements of radical constructivism. Today I see that it is insufficient, listening to students must be part of the process of knowledge creation. The voices of all stakeholders in knowledge creation must be given equal weight in the construction and production of new scientific facts. As every research project in the postgraduate space is generally linked to teaching and learning, obtaining of Master’s and PhD degrees is often executed through an assemblage. This community of practice can be in existence on a limited scale in time and space, but the fundamental and derivative epistemic authority that such as assemblage utilises or creates should and in my opinion does transcend the original platform.

The transcendence of epistemic authorities provides for a continuation of knowledge, it is and co-creates sociology of knowledge systems, and in the case of the assemblage members it transforms them. I am no exception and my transformation has been from a transmissionist and a radical constructivist to a collaborative academic. Water is fundamental to human life and survival. During my teaching and learning activities in the postgraduate space, I assisted students in mastering the vocabulary of the water treatment. They must know water is purified for the removal of chemical, biological and physical contaminants. However, now I also know that water provision and access to it, or a lack thereof, creates a personal connection of the students to the context of the water research, to the assemblage of their research project, to the community of practice in their postgraduate degree. This personal input and drive to join/help form an assemblage, whether macro or micro one, brings the students’ perspective to the postgraduate teaching and research arena. The starting point of the assemblage, or community of practice functioning is based on the priority principle, i.e. the knowledge the students have about their water story in the non-derivative sense. Being part of many assemblages, I have come to see that angle of the priority principle in the non-derivative sense, the community of practice has enriched me through the acceptance and non-rejection as non-data the students postgraduate stories.

I recently left the EHB and started a Disaster Management and Ethics Research Group (DMERG) which is still located in the Faculty of Pharmacy of Rhodes University. However DMERG is also a new macro-assemblage which is a vehicle for the transfer of the

limited fundamental epistemic authority I carry, along with some of my postgraduate students, on the topics related to disaster management and ethics. This new macro-assemblage is the result of the boundary of EHB which I have crossed and by doing so I have, in my humble opinion, contributed to the transfer of the knowledge created inside the EHB into a new research space. The process of the new macro-assemblage was not an overnight occurrence. It was started as an evolutionary process which culminated in the publication of an educational paper on the results of some of the EHB research (Tandlich et al., 2018) and bioethics in some research and educational activities (Ambang et al., 2019). Since I now sit on the Editorial Board of the journal, where the last two articles were published, I have undergone a complete scientist transformation to an academic who is more transdisciplinary in nature. Further evolution was done through the collaboration with a university in another setting, e.g. Technical University of Liberec. The experiences I have gained are being further developed by interacting and collaborating with academics from other cultural background.

Conclusions

This article provides an auto-ethnographic representation of the development of a personal postgraduate teaching and learning approach, as well as its development between 2006 and present day. Principles of the community of practice as an assemblage, its relationship to fundamental and derivative epistemic authority are put into context of the personal development of the author and the related collaborators. This work represents a way to introduce the personal account of transformation of one's teaching and learning approach. Such perspective is important for documenting researchers experience in a multi-cultural environment and its higher education space in countries such as South Africa.

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Family Violence Resolution Strategies.

Legal Prevention and Education Against Ignorance

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Abstract

The article analyses the strategies for reducing the phenomena of domestic violence, focusing on the legal preventive measures. It highlights the historical aspects of the problem, by referring to the legal framework, in trying to overcome it. By introducing the causes and the nature of the domestic violence in Uzbekistan, leveraging into a theoretical, historical and legal analysis, social measures are weighted in relation to the domestic violence. The methodological approaches in the study of social processes of domestic violence are used meanwhile evaluating the social consequences of domestic violence, considering the correlation between the increased instability in the society and the level of social dissatisfaction of the population. The paper, by referring to the Laws of the Republic of Uzbekistan “On the Protection of Women from Oppression and Violence”, as well as to several other laws and regulations on regard, makes a review to the reforms and notebooks such as “iron notebook”, “youth” and “women”, where special attention is paid to the correlations between unemployment of youth and women and the phenomena of domestic violence.

Keywords: iron notebook; youth notebook; youth; women’s notebook; problems of domestic violence; law; protection; rights; Uzbekistan.

This function includes, first of all, relying on the activists of makhallas, respected veterans with extensive life experience of venerable mothers, on your dear women, knowledge and spiritual potential.

Shavkat Mirziyoyev

Introduction

From November 25 of year 2021, the campaign “16 days of active actions against gender-based violence” has been announced in Uzbekistan. A series of meetings and events are held to clarify women’s rights: the essence of laws, regulations in support of women. Since November 25 is the International Day for the Elimination of Violence against Women under the Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence. Since 1990, the Council of Europe has actively advocated for the protection of women and girls from gender-based violence, in particular through the adoption of Recommendation 5 (2002) on the protection of women from violence, and through the implementation of a pan-European campaign to combat violence against women,

including violence in the family, the Council of Europe's New Convention on Preventing and Combating Violence against Women and Domestic Violence is the most progressive international treaty addressing this grave violation of human rights. The Convention aims to create a "zero tolerance" for this form of violence and represents a critical step towards making Europe and other regions a safer place to live.

It also explains the main innovation of the decree adopted in May 2021 "On additional measures for the rehabilitation of women victims of violence", aimed at creating a system for providing assistance to women who have been subjected to violence, preventing and eliminating the negative consequences of family and domestic violence. 29 centers for the rehabilitation and adaptation of women, financed from the state budget¹, have been created, as well as for the provision of prompt psychological and legal assistance, counseling and information to women who have suffered from oppression and violence, today a hotline "1146" is already operating. Events as the one at the Republican Center for Spirituality and Enlightenment, at SamPI, a financial institution, at the Tashkent State Economic University evidenced the interest in reports focusing in the rights guaranteed by the state.

Methodology: the methodological basis of the study is system analysis,

The relevance and purpose of the article is determined by:

- Firstly, the scale of the prevalence of violence in families and its consequences at all levels - from the individual to society as a whole.
- Secondly, - the need for scientific understanding of this problem in order to prevent all aspects of its manifestation and achieve a reduction;
- Thirdly, the practical need to develop an approach in New Uzbekistan to the prevention, overcoming and regulation of social processes of domestic violence.

Discussion

The spread of humanistic relations in the modern world has significantly influenced the reassessment of the socio-cultural norms of interpersonal and intergroup interaction. Respect for a person's personality, tolerance, orientation towards cooperation are becoming the priority goals of the development of social subjects. In Uzbekistan, as in other countries, conditions are being created for the establishment of the principles and ideals of humanism in the daily life of people, and significant changes have already been achieved in some spheres of society. In September 2019, Uzbekistan adopted the Law of the Republic of Uzbekistan "On the Protection of Women from Oppression and Violence." In order to implement this Law, on January 4, 2020, by a resolution of the Cabinet of Ministers "On measures to improve the system of protecting women from

¹ Republic of Uzbekistan, Year 2021

oppression and violence”, a number of documents were approved that are necessary to ensure the safety of women. In particular, a procedure has been developed for obtaining a protection order that provides state protection to women and girls who have suffered from harassment and violence. Today, in the fight against domestic violence, it is important to use modern means of communication that allow you to receive help without leaving your home. Thus, on the initiative of the Commission on Ensuring Gender Equality, the Telegram channel “No to Violence!” was aired, in order to prevent cases of domestic violence. Thanks to it, women and girls received free legal advice and psychological assistance. However, the social security of the individual continues to be an acute social problem. In modern society, there are various social norms, some of which prohibit violence against any person, others allow and justify it. On the one hand, humanistic ideas about relations between people lead to the assertion of orientations towards tolerance, respect for the individual, the need to resolve emerging conflicts in non-violent ways. At the same time, the norms for resolving controversial situations dealing with various forms of violence that have arisen at the initial stages of the historical development of society are preserved. There are also currently the use of economic coercion, psychological influence, the use of some forms of violence against women and children in the family. Even if there is a strong will and there are attempts to diminish incidences of domestic violence, this is the most important problem in society. It is required to develop an integrated approach to defining the essence of domestic violence, the main forms of its manifestation, objective and subjective factors leading to the emergence of violence in conflict situations between representatives of different gender communities. Thus, in today's Uzbekistan, when the country joined the UN Human Rights Council, the theoretician becomes even more relevant. The legal analysis of domestic violence is determined by the existing contradictions in the system of relations, leading to the emergence of severe coercion in resolving conflict situations in a modern family. At present, the situation remains ignorant of the very need for a deep and comprehensive scientific study of domestic violence, which was constantly reproduced in the past and is still present in a certain part of families. In modern society, there remains a need to study the problem of domestic violence, especially in relation to women. Many legal scholarships do not deeply reveal the historical and social basis for the spread of domestic violence. In them, the main attention is focused only on the study of the personal characteristics of the subjects and objects of violence. The importance of analyzing this problem lies in the fact that violence is an interaction not only between the subject and the object of violence, but also between social groups and communities that in one form or another allow the use of violence. Citing the Koran, the rights of mothers and the proper attitude of children to mothers are mentioned in several suras of the Holy Book, which speak of the rights of our mothers and fathers. One of the hadiths says: “(Once) a man came to the Messenger of Allah (peace and blessings of Allaah be upon him) and asked: ‘O Messenger of Allah, which of the people is most

worthy that I be good with him got along? " He said, "Your mother." (This person) asked: "Then who?" He said, "Your mother." (The man) asked: "Then who?" He said, "Your mother." (The man again) asked, "Then who?" (And then) he said (to him): "Your father." It does not say that the rights of fathers are placed below the rights of mothers. By following up this line of thought on the history of political and legal doctrines, it helps highlighting the following statements attributed to the Prophet Muhammad : "Everything that is created by the Almighty in this world is priceless and the most priceless among them is a woman. And according to the views of Omar Hayam, we read that, "I asked the priest:" Father, tell me, where is heaven on earth? Show the way there, how to go there, give me some landmarks? " The priest answered: "The path, son, you choose yourself. Paradise is at your mother's feet! " Motherhood is the highest form of a woman's patriotism: to serve her Fatherland through the education of wonderful people. This is the most important creative profession on Earth, in which a woman can realize herself as a person, and this is her genius and morality. Woman is nature itself, it is not only a mother, wife, sister, daughter, leader, but also the keeper of the family hearth, the successor of the human race, a symbol of wisdom, beauty, femininity, fidelity, stability, love of the people. "Mama!" - the first word of a child, which is sacred among all peoples of the world. Everyone knows that any social culture is based on a system of positive values, which is based on a positive image of a person. And the obligatory image on which a sustainable culture rests is a positive image of a woman as a mother. The destruction of this image alone entails the destruction of the entire culture and the degradation of society. How many works in the history of the development of mankind were dedicated to women - how many poets, composers, artists sang the image of the mother. A mother woman is the most important person in the life of each of us. Genius women were very different from each other. For example Tomaris - the woman who protected the ancient Turan from Cyrus II. Tekinakhanum is the mother of Amir Timur, Bibikhanum is the wife of Amir Timur and there are many of them, but they were separated by epochs, cultures, traditions and religions. They belonged to different strata of society. Among them were very young girls and grown women. They were very different: regal and commoners, strict and gentle, courageous and feminine, poor and rich, highly educated and intelligent with a natural mind. However, despite all the differences, only they knew how to love and support their children and husbands so selflessly. And this is their genius. But history has shown one thing, the most important thing, that women are somewhat superior to men in the ability to memorize, in verbal ability. They master the practical grammar of the language faster, begin to speak earlier, their vocabulary is richer. They are sincere, practical, intuitive, they socialize into life earlier. They are hardy. Resistant to the hardships of life. They are educators of the nation, the future of the country. In order to systematically organize support for women in Uzbekistan, an "iron notebook" has been formed and introduced in separate lists - a "youth notebook" for unemployed youth and a "women's notebook" for unemployed and no breadwinner women.

“The iron notebook” included families from vulnerable groups of the population who can count on financial assistance from the state through the makhallas. As you know, a woman is the guarantee of the future of a nation. It is women who educate the nation, the people.. The government adopted a resolution “On additional measures for the social support of women.” The Women’s Notebook aims to reach many women who have no one to share their problems with, including those who have lost their breadwinner, wandering in a foreign land or returning home, experiencing any difficulties and unable to find their place in life. Women over 30 years old who need social, legal or psychological assistance, as well as employment, are included in the “women’s notebook”. This is the basis for finding solutions to women’s problems.

According to this, women over 30 are included in the “women’s notebook” for mahallas in the context of sectors in the following categories:

- unemployed women in need of social protection;
- women in need who have lost their breadwinner; protection;
- women with disabilities of group I who need housing repair;
- women living in non-residential premises, who do not have a residential property on their or co-living family members;
- single women who have one or more children with disabilities I and II groups;
- women in need of medical protection (herself and her family members living together are in a difficult social situation, suffer from chronic or severely disabled diseases, with an unidentified group of disabilities, without sufficient sources of income);
- women in need of legal assistance;
- women in need of psychological counseling (women who have suffered from harassment and violence, who have social problems).

The “Women’s Notebook” is kept in the following order. The problems, needs and interests of a woman are studied on a home visit for 15 days in the first month of each half of the year. Problems are identified using a questionnaire, and the identified problems are included in the individual questionnaires of women within a period not exceeding 3 days.

Therefore, a modern, intelligent and nowadays woman still strives to be self-sufficient. In this regard, today special attention is paid to women, girls... Uzbekistan has joined all the main international treaties providing for the legal, social and economic protection of women from any form of discrimination and harassment. Gender-oriented laws “On guarantees of equal rights and opportunities for women and men”, “On protection of women from oppression and violence”, “On the protection of reproductive health of citizens”, “On amendments and additions to Article 15 of the

Family Code”, “On amendments to the Labor Code of the Republic of Uzbekistan ”- on the removal of restrictions related to the choice by women of previously prohibited forms of work and other gender-asymmetric provisions of labor legislation. Experts from such UN agencies as the UN Development Program, the Population Fund, the Children’s Fund, the Office of the High Commissioner for Human Rights, the Office on Drugs and Crime, the International Organization for Migration and the International Labor Organization participated in their development. More than 20 decrees and decrees of the President and government decrees were also adopted. A number of amendments and additions have been made to strengthen efforts to prevent violence against women and domestic violence, and to combat outdated customs. A mandatory gender-legal examination of legislative acts was introduced, aimed at eliminating the inconsistency of the provisions of regulatory legal acts with the principles of gender equality, identifying possible risks of a discriminatory nature in the process of their application. Everyone knows the brilliant phrase that “behind every brilliant man there is a great woman.” And it is filled with brilliant content! It was women who from time immemorial inspired men to feats, for their sake men fought in duels, in honor of their beloved they gave names to newly discovered stars, for their sake they went to the ends of the world, achieved great success in creativity, science.... The education and upbringing of women in the present is proved to be a direct and potent leverage in the education of the future generations. Taking into account these qualities and peculiarities of women in Uzbekistan, universities for the second year will introduce a budget quota for girls. The quota was introduced for the 2020/2021 academic year, as well as for the current academic year and since 2008 the girls are already studying at the universities of the country. Since the 4% quota allows girls to get higher education free of charge. Recommendations to candidates for this quota were issued through the mahalla ministry. The same reforms are envisaged in the New Strategy of Uzbekistan, which states that in 2026, 6000 girls will be admitted to the universities of the country for study on a free basis. On the national strategies in support of women, according to the President of Uzbekistan:

“There are many women in our country who set an example for everyone with their intellect, deep knowledge, great life experience, selfless work and high personal qualities. If, at the upcoming elections to the Oliy Majlis and local kengashs this year, such hardworking and educated women with a broad political outlook can demonstrate their potential and be elected as deputies or senators, then, I am sure, both the state and society will benefit from this.”

Today a new structure has been created in the Senate - the Committee on Women and Gender Equality. Its tasks included strengthening legislative activity and parliamentary oversight on women and family issues, considering the employment of women and developing their business skills, promoting women’s health, promoting medical culture in families, preventing delinquency and crime among women, human trafficking and

other negative phenomena such as family breakdown, early marriage and cases of suicide. Today in Uzbekistan there are about 30 normative legal acts to improve the status of women in accordance with the requirements of international standards. These include such laws as "On guarantees of equal rights and opportunities for men and women" and "On the protection of women from harassment and violence" which were adopted on September 2, 2019. According to the law, violence have been categorised in the sexual, physical, economic and psychological type. And harassment means harassment or any action (and inaction) that degrades the honor and dignity of a woman, for the commission of which there is no administrative or criminal liability.

A victim of oppression and violence has the right to:

- appeal to the authorized bodies and organizations or the court with a statement about the commission of harassment and violence against her or the threat of their commission;
- receiving free legal advice, economic, social, psychological, medical and other assistance in special centers, as well as through a free telephone line;
- appeal to the internal affairs bodies with a requirement to issue a protection order, and in case of violation of the conditions of the protection order - informing them about it;
- going to court with a claim for compensation for material damage caused to her and compensation for moral damage as a result of the perpetrated harassment and violence.

A protection order is issued by the internal affairs bodies for a period not exceeding 30 days from the date of registration. At the moment, regulatory documents are still being developed that will regulate the entire procedure for processing and issuing this protection order.

Evidences show that the social developments in Uzbekistan have brought to changes in the attitude towards women, by starting to consider women as an influential social force. A protective order gives us the opportunity to ensure the safety of a woman and her minor children. There are cases when conflicts repeatedly arise in the family or there is a complex psycho-emotional situation that puts pressure on a woman and her children, by bringing evidences of increased attempts of suicide or child abandonment. Women do not know where to turn and how to protect themselves.

Every year women in the country play an increasingly important role in public life, occupy leadership positions and do business. According to the IPU's annual report "Women in Parliament" and data from UN-Women, for the first time in history, as of January 2021, the global share of women in national parliaments was more than a quarter - 25.5%. According to the results of the parliamentary elections at the end

of 2019, they made up 32% of the deputies of the Legislative Chamber of the Oliy Majlis, 25% in the Senate. According to this indicator, Uzbekistan entered the top 50 countries (out of 190), ahead of almost all post-Soviet countries. This testifies to fundamentally new approaches and trends in organizing the activities of the Uzbek parliament. The systematic work of the Parliamentary Commission for monitoring the implementation of the National Goals and Objectives for Sustainable Development for the period up to 2030 was organized, where the fifth goal is devoted to the tasks of achieving gender equality. Its main tasks include monitoring the implementation of legislation, conducting a critical analysis of the development of those areas that are included in the National Sustainable Development Goals. An important achievement was the creation of the Republican Public Council of Women headed by the Chairman of the Senate of the Oliy Majlis, one of the main tasks of which, along with the full support of women and girls, is to coordinate the implementation of the provisions of the UN Convention on the Elimination of All Forms of Discrimination against Women and the implementation of the Beijing Platform for Action and National Action Plan.

There are three main scientific and practical outcomes related to this research:

- It represents an approach to the prevention of domestic violence, considered as a factor both in society and in the family, is proposed.
- The concept of “respect and honor of a woman” has been introduced into scientific circulation, meaning behavior at all levels of society and the formation in this way of a culture in society with a high tolerance to violence.
- The characteristic features of domestic violence are revealed, the law, regulatory legal acts, which include the legal framework, are analyzed, where the issuance of orders of protection for such relationships in families is considered. The same is valid for the country’s strategy to protect the rights of women from violence. In accordance with the Law of the Republic of Uzbekistan “On guarantees of equal rights and opportunities for women and men”, recommendations have also been developed for the establishment of an Advisory Council on Gender Equality in all ministries and departments and in labor collectives, advisory councils have been created. Thus, the law “On the Protection of Women from Harassment and Violence” creates a legal basis for providing victims with protection by the internal affairs bodies, and also allows to systematize the process of providing them with various kinds of assistance from the state. Although violence against women is illegal under current criminal law, there have been no previous regulations on the registration of cases of gender-based violence or measures recommended to provide protection and assistance to victims.

Conclusions

Ensuring equal rights and opportunities for women and men in the social, economic and political spheres is one of the main factors in strengthening peace and economic stability in our society. Taking this into account, the Senate of the Oliy Majlis at the fifteenth plenary session on May 28 approved the "Strategies for achieving gender equality in the Republic of Uzbekistan in 2020-2030." In 81 ministries and departments, a reserve of more than 15 thousand personnel has been formed, consisting of advanced and educated women and for the first time in the history of Uzbekistan, the number of women in the national parliament reached the level (32%) - the country ranks 37th among 190 countries in this indicator. According to the head of the Senate, the proportion of women in leadership positions has reached 27%. Six women were appointed as khokims, one as an ambassador. An innovation of these reforms is the system of covering the costs of educating needy girls who have lost their parents or one of them, single women who do not have a breadwinner, the number of grants for girls from low-income families for admission to higher educational institutions has been doubled. In addition, in the World Bank's Women, Business and Law Index in 2020, Uzbekistan was included in the list of 27 countries that "implemented significant reforms in the field of women's rights and gender equality", rose 5 positions and took 134th place out of 190. In September 2020, the UN said that no country in the world in a quarter of a century has come close to the full implementation of the Beijing Declaration on the Rights of Women. In the world, only about 25% of government officials and managers are women, the remaining 75% are still men. 16 women occupy leadership positions in the Ministry of Internal Affairs, 6 women are appointed by khokims and 1 woman is an ambassador. In addition, there are about 1,500 women in leadership positions at various levels. According to the results of the elections to the Oliy Majlis and local Kengashes in December 2019, women-deputies accounted for 32% of the total number of deputies of the Legislative Chamber, women-senators - 25% of members of the Senate. In local Kengashes, the number of women is 25.6%. According to this indicator, the parliament of Uzbekistan ranks 44th among 190 parliaments of the world. The practice has been introduced of allocating grants to vocational education institutions at the expense of the State Fund for the Promotion of Employment to finance the costs of vocational training for women living in low-income families. In order to strengthen ties with foreign organizations, jointly with such international organizations as UNICEF, UNFPA, UN, World Bank, Asian Development Bank, USAID, OSCE, EBRD, on the basis of bilateral proposals, annual joint plans are also being developed and implemented.

A series of meetings of associations, institutions, colleges, dealing with women and youth issues, round tables with young people, students and women in makhallas, universities and other auditoriums about gender policy and the protection of the rights of women, are considered as tools of sensibilisation, inclusion and development in pursuing the humanistic principle "The interests of mankind are above all".

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Students satisfaction with the online teaching process

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Abstract

This study is about student satisfaction in the online teaching process. The pandemic situation forced us to move the educational activities in the online environment for the safety of all its participants.

The methodological design is the quantitative one, the research method used is the sociological survey. This study tried to identify students' perception, effectiveness, satisfaction, and self-perceived efficiency regarding the teaching process in the online environment.

The questionnaire was translated and adapted into Romanian. It consists of 26 questions, divided into five dimensions. The sampling method was the non-probabilistic convenience one, with voluntary participation.

The results provided tell us those female respondents were more open to online methods, resulting in higher satisfaction despite common knowledge. However, the results should be viewed with reservations, as the data collected are not homogeneous, and the respondents were chosen by the voluntary participation method. This approach can be seen as a starting point for future research related to the satisfaction of the teaching process through e-learning.

Keywords: e-learning; satisfaction; online teaching; online virtual learning.

Introduction

The current pandemic situation forces us to move the teaching activity online for the safety of everyone who engages in this process. The online environment provides access to course materials and interaction between students and teachers.

This learning environment allows us to use multimedia technologies such as text, images, audio files, video files, or animations. Online learning assumes that the teaching process will be carried out in a virtual classroom, the teaching materials will be available on the Internet. A teacher must guide the virtual class. He plans the group's activity, and he submits the materials to debate by asynchronous (Google Classroom) and synchronous methods (chat, Google Meet).

Online learning means digital learning. To participate actively in this process, students must have the basics of ICT (Information and Computer Technology). ICT includes communication technologies, WI-FI, mobile phones. Electronic learning allows both teachers and students to access materials uploaded to online/e-learning platforms, materials provided by teachers to students, and materials uploaded by students for grading. Recently, a study aimed at using ICT (Gupta & Gupta, 2020), especially in digital learning, highlights the idea of collaboration and active learning. Harasim (2002) argues that when technology is applied in open and distance learning, the most important aspect of ICT is the potential for collaboration and communication. The study mentions that due to technological development, a new paradigm shift occurs. Teachers need to develop new teaching and learning methods to implement them with students effectively. Online learning should be seen as an opportunity to develop the skills to work online (Azlan et al., 2020).

Online learning is seen differently by each person, this being due to their own experience. The following types of e-learning (Ilie, 2007), characteristics, and technologies that need to be implemented will be presented and described: individual study, facilitated e-learning, instructor-led e-learning.

The individual study model is trying to produce experimental-based support for those who try to be self-learners. The materials provided for this study are stored on a web server and accessed through a browser. Those who follow this model are independent in the learning process. They follow steps to assimilate knowledge because they do not have a teacher to coordinate their activities.

The facilitated e-learning collaboration is based on the web resources offered by a teacher. The teacher's role is to answer questions and solve problems. The teacher acts as an evaluator of the student.

The "virtual class" model uses web technologies to support online classes at a time. A variation of technologies is used: video and audio, chat, application sharing, virtual table.

The teacher presents the subject with the help of PowerPoint slides. Students can ask questions and receive answers through the chat window. The disadvantage of this method is the network's bandwidth, which can affect the quality of information.

Advantages and disadvantages of e-learning

Learning online requires using a device to communicate. The studies show that students tend to be more active online than in the traditional educational setting (Hung, Chou, & Chao-Hsiu Chen, 2010). Thus, students have more time to think about a topic of discussion. They overcome the fear of answering questions on the spot. The questions

engage the students in this process, making it easier for understanding. In addition, to prevent burnout and loss of interest, students should take advantage of the opportunity to work with other students to elaborate on homework. Haavind (2000) argues that e-learning allows students to interact with the teacher and other students and work with their colleagues to complete their educational tasks. The nature of the asynchronous functions within an online course, such as email and e-learning, allows students to think and shy students to engage in conversation (Barbour & Reeves, 2009).

Palloff & Pratt (1999) turned their attention to forming a community in cyberspace. They examined relationships between individuals within online communities. They noted that the help from communication technologies changed society from a location-based community to a cyber one, where individuals and people created a new and different identity from those they had in real life. Since information processing takes longer than face-to-face interaction, we can say that this environment fits more naturally with introverted people. Individuals find it much easier to interact through this created avatar in cyberspace.

Increased availability and evolution of technology have made it easier for computers and mobile phones to access educational institutions, at home or work. Nowadays, most students have internet access both on their computers and on their phones. Connected with this advantage is that students no longer spend time on transport and on the way to university. (Mpofu, 2016)

One advantage offered by e-learning is the flexibility to access courses from any location. E-learning gives both universities and students the flexibility of time and place. E-learning improves the effectiveness of knowledge by accessing a large amount of information (Arkorful & Abaidoo, 2015).

Another advantage by which the effectiveness of e-learning is improved is it provides the opportunity for students to communicate through e-learning platforms. So, e-learning helps remove barriers that have the potential to prevent participation, including the fear of talking to other students (Arkorful & Abaidoo, 2015). E-learning can motivate students to interact with others and respect their views, which are not always the same. E-learning facilitates communication, as well as relationships to sustain learning.

Some studies mention that the advantage of e-learning is that the teacher can focus his attention on the students' individual needs. For example, in their book Rosenberg & Foshay (2002) noted that one crucial advantage of e-learning is focusing on students' needs rather than on the needs of teachers or institutions.

Another advantage is that it allows students to understand the lesson at their own pace, reviewing the material as often as they want. For teamwork, students can

collaborate through Google Meet. For work tasks and tests, the teacher may limit the time and date for the activity.

Although it offers many advantages, e-learning has disadvantages. For example, despite claims that e-learning can improve the quality of education, it is argued that producing materials online and making them available to students increase learning only for certain specific topics (Mayes, Dineen, McKendree & Lee, 2002).

It is intended to see whether the transition to a flexible model using technological means, but continuing with the face-to-face model, will be beneficial for students. Students get online courses through different platforms. They could see presentations slides and listen to the teacher's recording. Students who used online platforms during the semester had three hours of face-to-face educational activity. That could look like a hybrid educational system. By combining classic teaching with online, the students' results were improved. The study was done on the same students, who in the previous year attended the classical courses and the following year in the hybrid version (Downling, Godfrey, & Gyles, 2003).

Mayers et al. (2002) mention that online learning has a complete lack of personal interaction, not just between the teacher and students but between students. He notes that the e-learning system, in which community members do not communicate actively, will make students much shyer in expressing themselves freely and exposing their point of view to the class.

Online learning lacks interaction or networking, which affects the effectiveness of learning objectives. Therefore, students need to acquire a strong motivation and time management ability to reduce those effects.

The educational process is much easier when carried out by the traditional method, face to face, with the teacher. Online education is prone to plagiarism, deception, and lack of learning motivation.

Not all subjects can use online learning as a method in education. For example, some scientific fields that require practical experience are much more difficult to study through online interactions. The researchers argued that e-learning is more appropriate for social and human sciences than in medical science and engineering, where the development of practical skills is needed.

Another disadvantage that does not depend on the student or teacher is the poor connection of the internet that can disrupt the course sessions, leading to poor quality of information and interactions. This problem is more evident for students from rural areas with poor or non-existent internet infrastructure or who cannot afford to pay for it.

The obvious disadvantage of online teaching is no active interaction between the teacher and the student. The student does not receive immediate clarification when encountering a problem or when a concept is unknown. In addition, due to minimal interaction, students may be less motivated to study on their own.

Methodology

The methodological design is a quantitative design. The research method is a sociological survey, and the instrument used was the questionnaire. Quantitative design deals with the quantitative measurement and "calculation" of information obtained by applying an empirical approach, which measures the object of study with sufficient precision to present detailed conclusions (Obrad, 2018). The sociological survey is a collection of information on the opinions, attitudes of individuals, results on the behaviors of human groups, their tastes, needs, their motivations for their way of working, living, having fun (Grawitz & Pinto, 1972). The questionnaire is a sociological research tool through which individuals' opinions and attitudes on a particular topic of social interest can be analyzed. I chose the quantitative design compared to the qualitative design because I wish to have a descriptive image, an overview of this phenomenon. (Chelcea, 1975).

Our research objectives were to identify students' perception of the usefulness of the materials offered in the teaching process; determination of effectiveness in online time interactions; surprise students' satisfaction with online interactions; students' perceived self-efficacy with the use of e-learning platforms; to determine student's ability to use multimedia aspects (camera, microphone, presentations, images, videos) in online learning.

Research instrument

The questionnaire was written in an online format using the Google Forms platform (<https://www.google.com/forms/about/>), through which it was more easily distributed for completion. This research tool consists of 26 items about online learning, divided into five dimensions. The questionnaire was adapted from a study of the Moodle platform (Chou, 2014).

The sampling method used, and the selection processes applied.

Non-probabilistic convenience sampling technique was used for this study. The convenience sample was based on voluntary participation. This model implies the inclusion in the sample of available and accessible cases (Murairwa, 2015). As an example, we can take students in a class. They are not a representative sample for all students. In the first phase, we have chosen several subjects that meet the conditions for inclusion in the sample. In the second phase, they were asked to find other respondents who met specific criteria (age, educational level).

Results

To highlight the differences between gender and perceived usefulness, we used the T-test for independent samples. The value of the independent T-test was $t(224)=4.77$, $p<0.01$, at a significance threshold of $p=0.033$. Thus, there are significant differences in the perception of male students ($m=3.05$, $Sd=1.82$) and perceptions of female students ($m=4.38$, $Sd=1.59$) in terms of the usefulness of online education. Female respondents perceive these methods as more effective and valuable than male respondents, who also consider them effective but to a lesser extent.

The differences between gender and online learning satisfaction were tested with the T-test for independent samples. The result of the Levene F test shows that the groups were homogeneous, the value of Levene $F=2.71$, at a significance threshold $p>0.05$. There are significant differences between the means, highlighted by the value of the independent t-test, $t(224)=3.02$, $p=0.003<0.05$. Thus, there are significant differences between the perception of male students ($m=3.19$, $Sd=1.27$) and the perception of female students ($m=3.96$, $Sd=1.55$) in terms of satisfaction of using online learning platforms. A possible explanation could be that they adapted to online learning methods more quickly, so they had greater openness to online processes and interactions.

To see the differences between gender and respondents' confidence when using online learning platforms and their functions, we used an independent t-test. The Levene F test results show that the groups are homogeneous, the value of Levene $F=0.77$, at a significance threshold $p>0.05$. Thus, there are significant differences between the groups' average, highlighted by the value of the independent T-test, $t(224)=3.68$, $p=0.01<0.05$. There are significant differences between the perception of male students ($m=3.63$, $Sd=1.80$) and the perception of female students ($m=4.73$, $Sd=1.76$) in terms of self-satisfaction with the use of online platforms. Female respondents have a higher degree of confidence in using online platforms and their related functions than male respondents, who have a high degree of confidence but are lower than those in the first category.

For the differences between gender and the satisfaction of using multimedia tools in the online teaching-learning process, we used an independent t-test. The Levene F test results show that groups are homogeneous, the value of Levene $F=0.77$, at a significance threshold $p>0.05$. There are significant differences between the perception of male students ($m=2.35$, $Sd=1.52$) and female students ($m=3.29$, $Sd=1.64$) in terms of the satisfaction of using multimedia tools in the online teaching process. The observed differences are significant, highlighted by the value of the independent t-test, $t(224)=3.40$, $p=0.01<0.05$. Female respondents speak and tend to be more active in using the camera and microphone during meetings on related platforms than

male respondents, who tend to be more reserved in using the camera, microphone, and tools related to online interactions.

We observed no difference between students from different study years with perceived efficacy of online teaching, satisfaction with online systems, and multimedia instructions in online interactions. For testing, those differences were used One Way Anova.

We used the T-test for independent samples to highlight the differences in perception between students attending a particular university center and the effectiveness of e-learning. The Levene F test results show that the groups analyzed are homogeneous, the value being Levene $F=2.73$, at a significance threshold $p>0.05$. There are significant differences between the two groups, highlighted by the value of the independent T-test, $t(140)=3.02$, $p=0.003<0.05$. There are significant differences between the perception of students from Bucharest university centers ($m=3.74$, $Sd=1.59$) and those from Timisoara university centers ($m=2.86$, $Sd=1.78$) in terms of the effectiveness of these methods and practices. Respondents from Bucharest university centers tend to perceive online learning more than respondents from Timisoara university centers.

We used the T-test for independent samples to highlight the differences in perception between male and female respondents regarding satisfaction and the teaching process in the online environment. The Levene F test results show that the groups are homogeneous, the value of Levene $F=0.33$, at a significance threshold $p<0.05$. There are significant differences between the average of the two groups, this being highlighted by the value of the independent T-test, $t(224)=4.10$, $p<0.001$. There are significant differences between the perception of male students ($m=14.78$, $Sd=7.50$) and the perception of female students ($m=19.90$, $Sd=7.31$). Thus, female respondents are more satisfied with the processes and methods that make up the online teaching process.

Conclusions

In the last period, the teaching process has moved to online. Students had to adapt to the current situation and transition from face-to-face teaching to online teaching with the help of e-learning platforms.

There is a significant difference between female and male respondents regarding the satisfaction of the teaching process in the online environment. The mean of female responses is higher than responses offered by male respondents. These results provided by respondents show us that females are more satisfied with the teaching process in the online environment than male respondents. This phenomenon could

be explained by female respondents' ability to adapt quickly and use most e-learning platforms and related functions.

There is no significant difference between the student's year and the respondents' utility and perceived efficacy compared to the online teaching process. Thus, this analysis shows us that students perceive equally the processes related to e-learning, regardless of the year from which they come.

It can be observed that regardless of the year of study, the degree of satisfaction does not differ significantly.

The results show no significant differences between male and female individuals regarding perceived self-efficacy and satisfaction with e-learning platforms.

The data showed significant differences between respondents from Bucharest university centers and Timisoara in their desire to use multimedia elements in the online learning process. Thus, respondents from Bucharest university centers tend to use the multimedia elements related to e-Learning platforms with greater openness. One possible explanation for this result could be that university centers in Bucharest would have e-learning/online communication platforms developed before the pandemic, having a technical advantage over respondents in university centers from Timisoara.

Based on the analyses, we have found that there is also a perception that male people are more inclined to use technology. This study reveals that female respondents had a greater openness than male respondents in the case of online education and the use of e-learning platforms.

Based on the analyses carried out by the year of study and the dimensions of satisfaction in the online education process, we noticed that the year of study does not influence respondents' perceptions.

The analyses show that students from university centers in Bucharest are more satisfied with the methods and elements that form the online teaching process than respondents from university centers in Timisoara.

The results should be looked at with reservations, as the data collected are not always homogeneous, and the sample was chosen by voluntary participation method. This research can be seen as a starting point for future research related to the satisfaction of the teaching process through e-learning.

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Economic Strain and Adolescent Violence.

Are extracurricular activities a conditioning effect?

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Abstract

This article examines the extent to which participation in sports acts as a conditioning effect to the relationship between economic disadvantage and adolescent violent delinquency. Deriving hypotheses from general strain and social control theories, we use data from the National Longitudinal Study of Adolescent Health to test if type of extracurricular activity participation diminishes the risk of economic disadvantage on violent delinquency. In support of social control theory, the direct effect of academic clubs and performing arts is negatively associated with adolescent violence. Additionally, analyses indicate that participation in contact sports decreases the relationship economic disadvantage and violent delinquency when other strain controls are added including race/ethnicity, family structure, lack of parental supervision, etc. Overall findings are expected of the social control conditioning effect of general strain theory.

Keywords: participation in sports; economic disadvantage; adolescent delinquency; social control theory.

Introduction

To what extent does participation in extracurricular activities act as a buffer for poor youth and violence, rather than perpetuating it? Prior research suggests that both financial strain (Allison et al. 1999; Anderson 1999; Baron 2007; Bearman and Moody 2004; Elliot et al. 1996; Kasarda and Janowitz 1974; Kingston, Huizing and Elliott, 2009; Messner and South 1986; Sampson, Morenoff, and Earls, 1999; Shaw and McKay 1942; Webber 2008) involvement in contact sports may lead to violence (Fields, Collins, and Comstock 2010; Kreager 2007; Steinfeldt et al. 2012; Theokas 2009; Young 2013), while participation in performing arts and academic clubs is associated with less violence (CITE). Much of the current research suggests that involvement in extracurricular activities has positive outcomes for adolescents such as academic achievement, fosters closeness to school peers, teachers, and coaches (Coakley 2011; Farb and Matjasko 2012; Fraser-Thomas 2007; Fox et al. 2009; Hughes and Coakley 1991). What has not been addressed is whether or not extracurricular activities may provide a buffering effect for economic strain on violence.

Based on Agnew's (1992) hypothesis that conditioning effects such as social control, social support, and social capital serve to inhibit strain related juvenile violent behavior, it can be argued that the effects of sports participation compared to other extracurricular activities may also serve as a form of social control with respect to delinquent violent behavior. Prior research has indicated that involvement in sports can reduce the likelihood of engaging in delinquency primarily because sports participation involves elements of social control i.e., attachment, involvement, commitment, and belief (Cernkovich and Giordano 1992; Steward and Simons 2006). Participation in sports may moderate the economic disadvantage-delinquency relationship in a fashion similar to religiosity (Pitt and DeMaris 2019).

As there has been no empirical examination to date of the moderation effects of adolescent extracurricular participation upon the relationship between economic disadvantage and violence, the main purpose of this study will be to expand our knowledge of the manner in which these factors might condition the effect of economic disadvantage strain on violence. Further, as there are discrepancies in the literature on type of activity, especially sports, this study will provide a more nuanced understanding of those differences as they pertain to economic disadvantage. To this end, because some involvement in extracurricular activities along with other activities has a similar crime inhibiting effect another purpose of this study is to untangle the possible conditioning effect of participation in extracurricular activities on the relationship between economic disadvantage and teen violence.

This study utilizes an integrated theoretical approach whereas social control theory may be a conditioning effect to general strain theory (GST). As such, the current study allows for the expansion of the theoretical and empirical literatures to include participation in extracurricular activities as a potential conditioning factor in the economic disadvantage-violence relationship. This study utilizes the National Longitudinal Study of Adolescent Health (Add Health), which is a nationally representative sample of adolescent 7th to 12th graders (Chantala and Tabor 1999) and uses waves I and II.

Theoretical background

Strain Theory

Strain theory in its original form suggests that there is a mismatch in what one desires to obtain and what is attainable, an idea that is predicated in part on the Durkheimian concept of anomie. Agnew's General Strain Theory (GST) elaborates on traditional macro-structural strain models proposed by Durkheim ([1897] 2006), Merton (1938) and Cloward and Ohlin (1960) via the use of a micro-level social psychology perspective (Agnew 1985, 1992, 1999, 2001). Agnew (1985) introduced a different type of strain, which is the failure to escape certain situations. Agnew found that individuals who could not escape from these bad environments would be more likely to be involved in violence,

aggression, and other forms of negative behavior directly and indirectly through the expression of anger. Agnew concluded that there are three central components to GST: strain, negative emotion, and coping strategies.

According to Agnew's GST (Agnew 1992), crime is committed through the effects of strain caused by negative life events prompt negative emotional states and that the stress experienced in that state must be eliminated or removed in some manner (Agnew, 1992, 1997, 2001). Agnew posited three types of strain contributing to the likelihood of violent delinquency and offending behavior; failure to achieve positively-valued goals, removal of positive stimuli, and the introduction of negative stimuli.

Additionally, these three types of strain increase an individual's feeling of anger, an emotion that not only increases the desire for revenge, but also helps to both justify aggressive behavior and violence. In looking specifically at strain and its relationship to violent delinquency, Agnew (1992, 2001) found that economic disadvantage strain is accumulative; that is to say, economic disadvantage leads to additional stressors such as those within the family context (e.g., domestic violence between parents and child maltreatment), the formation of criminogenic relationships (e.g., delinquent peers), lack of resources within the community, and racial discrimination.

Accumulative strain thus can lead to violent delinquency because it further depletes an individual's resources that would allow him or her to cope with strain effectively (Agnew 2001; Slocum, Simpson, and Smith 2005). For example, it is not only the lack of family income that creates strain, but also the family processes related to not having enough money. Poorer families often lack the resources to adequately supervise their children, less availability to good schools, and a lack of supervision has been associated with higher rates of violent delinquency (Anderson 1999; Heimer and Matsuada 1994). Families who experience economic disadvantage are also significantly more likely to be susceptible to dealing with stress through violence (Barth, Wildfire and Green, 2006; Lansford et al., 2007); indeed, violence within the home has been found to be highly correlated with future violent delinquency. For instance, children exposed to domestic violence between their parents or other adults within the home are more likely to suffer from a variety of emotional and social problems, as well as to engage in violence against their peers, attempt suicide, abuse drugs and alcohol, run away from home, engage in teenage prostitution, and commit sexual assault (Strauss, Gelles and Smith, 1990).

Adolescents may cope with the stresses and strains of economic disadvantage when there are strains in their household by forming negative relationships with other delinquent and violent friends. This is most common among adolescents who reside in communities that are stricken with economic disadvantage. This often has more to do with friendships networks. In Anderson's (1999) ethnographic study of inner-city black youths in Philadelphia, in areas plagued by economic disadvantage, adolescent

boys adhere to a “code of the streets” that involves the perception of being tough and the use of violence as necessary to achieve desired goals. This code is often taught to younger children by older adolescent peers as a way to navigate the streets (Haynie, Silver, and Teasdale 2006; Stewart and Simons 2006). This same type of behavior has been reported with involvement in certain types of team sports (CITE).

Economic Disadvantage and Violent Delinquency

Economic disadvantage is one of the four main correlates of juvenile violent delinquency (Rekker et al., 2015). However, much of the literature examining the relationship between economic disadvantage the violent delinquency shows merely an association between the two but does not consider how disadvantage is operationalized (Office of the Surgeon General 2001). Empirical research indicating that economic disadvantage is related to violent delinquency tends to be measured by relative economic deprivation (Baron 2007; Messner and South 1986; Webber 2008), as a socioeconomic (SES) measure which includes parental educational level, parental income, and/or parental occupational status, or as concentrated disadvantage, such as living in poor neighborhoods (Allison et al. 1999; Anderson 1999; Bearman and Moody 2004; Elliot et al. 1996; Kasarda and Janowitz 1974; Kingston, Huizing and Elliott, 2009; Sampson, Morenoff, and Earls, 1999; Shaw and McKay 1942).

Studies examining the relationship between economic deprivation and violence indicate that there is a strong relationship with violence (Baron 2006; Messer and South 1986; Webber 2008). Baron (2006) examined the following factors to analyze the relationship between economic deprivation and juvenile violence: income dissatisfaction, unable to meet monetary goals, and objective structural factors that led to crime. Barron (2006) utilized a sample of youth that were homeless, to examine the relationship between relative deprivation and crime. Street homeless youth were categorized as lacking employment, money, food, and shelter and were more likely to engage in higher levels of violent juvenile offending when compared to school populations (Baron 2006). In addition, Baron (2006) found that youth who are homeless and spend a considerable amount of time socializing on the streets, are more prone to participate in violent delinquency. Similarly, Messer and South (1986) found that despite race, those who experienced economic deprivation were more likely to engage in violent delinquency. Both studies indicate that there is a relationship between economic deprivation and violent delinquency.

Empirical studies that utilized the economic disadvantage measure as socioeconomic status (SES) on violent delinquency are mixed (Braithwaite 1981; Johnstone 1978; Tittle and Meier 1990, 1991; Wright et al. 1999). For example, Rekker et al. (2005) found that youth from low socioeconomic families are more likely to engage in delinquent behavior. That is to say, parents may struggle with finding and maintaining steady employment, food insecurity, lack of community resources, or lack of support, guidance, and structure

needed to deter youth from engaging in delinquent activity. Moreover, youth who live in families with low socioeconomic statuses, may experience strain more frequently and severely as compared to juveniles from families with higher socioeconomic statuses. Anderson (1999) argues that time spent in economically disadvantage setting, and lack of role models can lead juveniles to engage in violent delinquency (Parker, Reckdenwald, 2008; Brookman, Bennett, Hochstelter, Copes, 2011). When applying Robert Agnew's general strain theory, failure to escape certain situations would coincide with economically disadvantaged youth having limited opportunities to live, play, and work outside of their economically disadvantaged communities. The removal of positive stimuli can be associated with the lack of male role models present within economically disadvantaged communities. A theoretical study by Gale (2007) found that the integration of African American male role models into black communities could help break the cycle of criminal involvement that young males engage in. Gale (2007) also proposed that having male role models can have a positive effect on helping young males reach their life goals.

A study conducted by Rekker et al., (2015) examined the relationship between socioeconomic status and juvenile delinquency. One of the primary research questions of the study was to determine if socioeconomic status was related to juvenile delinquency. Data from the youngest cohort of the Pittsburgh Youth Study was utilized, where 503 boys participated in 10 annual waves (Rekker et al., 2015). The data revealed that many of the participants were from low socioeconomic families (Rekker et al., 2015). The study assessed delinquency by asking juveniles to report on their delinquent behaviors by completing the Self- Reported Antisocial Behavioral Scale, the Self-Reported Delinquency scale, and the Youth Self-Report. The three surveys were used to measure minor delinquency (e.g., non-violent offenses), moderate delinquency (e.g., gang fighting or simple assault), and severe delinquency (e.g., burglary, automobile theft, forcible robbery, aggravated assault, rape or homicide) (Rekker et al., 2015). If a juvenile committed an offense within one year that could be categorized as minor, moderate, or severe delinquency, that would represent a positive construct (Rekker et al., 2015). The results indicate that 49.9% of the participants committed minor delinquency, 34.0% committed moderate delinquency, and 31.6% committed severe delinquency (Rekker et al., 2015). Socioeconomic status was operationalized as a combination of educational level, household income, occupation, and being on welfare (Rekker et al., 2015). The results of the study indicate juveniles are more likely to engage in violent behavior if they have a lower socioeconomic status. Youth are also more likely to engage in moderate to severe delinquency during the years when their parent's socioeconomic status is lower, as compared to the years when their parent's socioeconomic status is higher (Rekker et al., 2015). Wright et al. (1999) examined whether the relationship between economic disadvantage and delinquency was correlational or causal. The study identified delinquency as juveniles who committed alcohol and drug

use, violent acts, and non-violent acts that were committed before the participants reached the age of 21. Socioeconomic status was determined by Elley and Irving (1976) scale of parental occupational status; in addition, their model accounted for parental education achievement and joint income. Wright et al. (1999) found that the link between socioeconomic status and delinquency was related to a person alienation, financial strain, aggression, and a decrease in educational and career goals. Wright et al., (1999) concluded that there is a causal relationship between socioeconomic status and delinquency, as both can have an indirect negative and positive effect on delinquency. But research shows that there is little causal relationship between socioeconomic status and delinquency (Wright et al., 1999).

There is a significant amount of literature pertaining to the relationship between concentrated disadvantage and violent delinquency (Allison et al. 1999; Anderson 1999; Elliot et al 1996; Kasarda and Janowitz 1974; Kingston et al 2009; Sampson et al. 1999; Shaw and McKay 1942). Shaw and McKay's classic study in 1942 on the geographic distribution of delinquent boys and the way rates of delinquency varied from area to area in Chicago has often been used to understand the relationship between concentrated economic disadvantage and juvenile delinquency. Their main findings, which are still referenced today, are that socially disorganized areas contribute to the occurrence of juvenile violent delinquency when these areas experience low residential stability, high rates of economic disadvantage, and are racially heterogeneous. That is, much of the research shows that living in a neighborhood that is predominately poor increases an adolescent's likelihood of engaging in delinquency and especially in violence.

It is clear that the literature on the relationship between economic disadvantage and delinquency does rest upon the operationalization of economic disadvantage. With that said, the fact that the economic disadvantage-delinquency relationship seems to vary depending on how economic disadvantage is measured is suggestive that economic disadvantage is multidimensional in nature. In other words, it may be the case that economic disadvantage should be operationalized in a way such that all possible aspects of economic disadvantage (i.e., SES elements, relative deprivation elements, and concentrated disadvantage elements) are captured.

Extracurricular Activities and Violence: Social Control Theory

Social control theory, as outlined by Hirschi (1969), posits that institutional forces prevent violent delinquency through attachment, commitment, involvement, and belief. First, attachment refers to an adolescent's relationships with significant people, predominately in this case, coaches, and peers/teammates. Adolescents who do not care what their parents, peers, or teachers think about them are more likely to engage in delinquency. Second, commitment refers to investment in conventional lines of action, such as getting an education or pursuing a career. Adolescents who

lack investments tend to engage in more delinquency because they have nothing to lose. Third, involvement is the amount of time spent in conventional activities. Being highly involved in sports does not leave much time to commit delinquent acts. Finally, the last element is the belief that the rules of society should be followed. Adolescents who believe that engaging in certain behaviors is wrong will not do so.

Involvement in extracurricular activities encourages the formation of positive relationships (i.e., attachment) with teachers, coaches, and peers (Darling, Cadwell and Smith, 2005; Mahoney and Strattin 2000). Specifically, Mahoney and Strattin (2000) found that these relationships were associated with a more positive orientation toward school and less involvement in negative outcomes. For instance, Shields (2001) found that music education is an effective intervention for at-risk urban youth because it provides mentoring from teachers and supportive friendships with other peers in the program. In addition, much of the literature has pointed to the positive aspects of participation in extracurricular activities (Coakley 2011), such as higher GPA/grades (Eccles and Barber 1999; Fox et al. 2010; Mahoney et al 2003; Marsh 1992; Zaff et al 2003), higher standardized test scores (Eccles et al 2003), peer friendships through teammates (Denault and Poulin 2009), closeness to peers (Thomas and Cote 2009), coach/adult positive relationships (Thomas and Cote 2009), school/community attachment (Eccles and Barber 1999; Fredricks and Eccles 2005; and Thomas and Cote 2009—community belonging) liking of school, more educational support, and higher academic performance (Barber et al 2001).

Another set of literature has suggested that type of activity matters (Alder and Alder 1998; Crissey and Honea 2006; Kreager 2007; Pappas, McKenry, & Catlett 2004). For instance, Kreager (2007) examined the relationship between school sports and male violence. He found that males involved in contact sports, such as football and wrestling, were more likely to be violent than males who participated in other types of sports. Similarly, Steinfeldt et al (2012) found that male football players are more likely to engage in physical bullying behavior if they had role models who promoted the behavior. Performing arts participation has been shown to increase self-esteem, improve grades, decrease school dropout, and form attachment to one's educational goals, academic peers, and teachers (Barber, Eccles, and Stone 2001; McNeal 1995; Office of Juvenile Justice and Prevention Programs 2001).

Despite the differences in type of activity, the attachment to significant others (e.g., peers, teachers/coaches, parents) is important for teens who participate in extracurricular activities. These positive relationships generally keep teens from engaging in delinquency and other negative outcomes. Attachment to peers and friends or other positive relationships can be a significant way for coping with the strains of economic disadvantage or other negative stimuli. It is therefore expected that involvement in extracurricular activities will act as a means of coping among poor adolescents.

Current Study

Clearly based on the previous research, there are gaps in our understanding of the relationship between economic disadvantage, violence, and extracurricular participation. Much of the research on economic disadvantage and violence focuses on why violence occurs rather than why it does not occur. The strains associated with economic disadvantage may be related to engaging in violent delinquency. But it has been suggested (Agnew 2001), that certain factors may reduce the strain-violence relationship. The current investigation hopes to identify the possible conditioning association of extracurricular participation.

This study seeks to make two contributions to the field of sociology/criminology. First the findings on direct relationship between extracurricular activities and violent delinquency are inconsistent, which may be problematic on how it may be a measure of social control (Froggio 2007). Second, this study builds on Agnew's suggestion about the possibility of certain factors as conditioning effects on strain.

Hypothesis:

H1: Involvement in any type of extracurricular activities will decrease the relationship between economic disadvantage and violence.

Data and Methods

Data

This study uses The National Longitudinal Study of Adolescent to Adult Health (Add Health), which is a nationally representative sample of U.S. adolescents in grades 7 through 12 that was first conducted during the 1994-1995 school year (Bearman, Jones, and Udry 1997). Add Health initially surveyed over 90,000 students from 132 schools in 80 different communities using a school based clustered sample design. A subset of 20,745 adolescents completed in-home interviews during the Wave I phase that was conducted in 1994 and 1995. A total of 14,396 adolescents completed both an in-home and an in-school survey during Wave I. Wave II data were collected in 1996, in which approximately 71% ($n=14,738$) of the Wave I sample participated. It should be noted that Wave I 12th graders who graduated between waves were not included in Wave II. Also, those students with physical disabilities were excluded from Wave II.

The Add Health dataset is appropriate for use in this study for the following reasons. First, the Add Health data contain rich measures of economic disadvantage, delinquency, religiosity, extracurricular activities, family supports, and sociodemographic controls. Second, Add Health is a nationally representative sample of adolescents. Despite its advantages, there are two main limitations associated with the Add Health dataset. First, since the dataset uses a school-based sampling technique, it excludes those

teens who have dropped out of school. Teens who drop out of school tend to engage in more violent and serious acts of delinquency, acts which either caused them to either be expelled from school or sent to a juvenile facility (Staff and Kreager 2008). Second, since there is only one year between each wave, the possibility of behavioral change is compressed.

Sample

As stated previously, there were 20,745 respondents who were interviewed during Wave I, yet the response rate in Wave II dropped the sample size to 14,738. The cases that had valid data on all variables brought the base sample for this investigation to 10,798. The use of mean substitution for missing data on all independent variables allowed for an increase of the base sample to 14,091 (Chantala and Tabor 1999).

Measures

Dependent variable

Violent delinquency was created from eight measures that asked respondents two different sets of questions. The first four measures asked the respondent, "How often did you (a) engage in a serious physical fight; (b) hurt someone badly enough to need bandages or medical care; (c) use or threaten to use a weapon to get something from someone and; (d) take part in a fight where a group of your friends was against another group?" These four measures were coded on a scale of 0 (for never) to 3 (for 5 or more times). The second set of questions asked the respondent, "In the past 12 months did you (a) pulled a knife or gun on someone; (b) shoot or stab someone; (c) carry a weapon to school, and (d) use a weapon in a fight?" These four measures were coded 0 (for no) and 1 (for yes). The violent delinquency items were standardized because they had different measurement metrics. The eight items were then scaled to create the violent delinquency measure by taking the mean of these and multiplying by the number of items present. The scale created from all eight measures had a Cronbach's alpha reliability of .75.

Key Independent Variables

Extracurricular participation was created from an aggregation of twenty-eight separate extracurricular activities measured at Wave I. At the beginning of the school year each respondent was asked, "Are you involved or plan on participating later in the year in...?". A list of twenty-eight different extracurricular activities was then presented to the respondent. The Add Health codebook notes that because the interview was conducted at the beginning of the school year (September), some of the activities would not be taking place until later in the year. From the twenty-eight activities, four binary measures were created: performing arts, contact

sports, noncontact sports, and academic clubs. These were each coded 0 (for no participation/no plan to participate) or 1 (for participation/plan to participate). Participation in performing arts consists of five activities: drama club, band, choir, orchestra, and cheerleading/dance team. Contact sports included the following: basketball, football, ice hockey, field hockey, soccer, or wrestling. Noncontact sports consist of the following sports: baseball/softball, swimming, track, tennis, or volleyball. Participation in academic clubs included the following: French club, Spanish club, Sports participation was created from an aggregation of sports activities measured at Wave I. At the beginning of the school year each respondent was asked, "Are you involved or plan on participating later in the year in...?". A list of twenty-eight different extracurricular activities was then presented to the respondent. The Add Health codebook notes that because the interview was conducted at the beginning of the school year (September), some of the activities would not be taking place until later in the year. These were each coded 0 (for no participation/no plan to participate) or 1 (for participation/plan to participate). Contact sports included the following: basketball, football, ice hockey, field hockey, soccer, or wrestling. Noncontact sports consisted of the following sports: baseball/softball, swimming, track, tennis, or volleyball.

Economic disadvantage strain measure

The literature in criminology measures economic disadvantage based on a combination of income, educational level, occupation, welfare/government assistance, and concentrated disadvantage (Allison et al. 1999; Anderson 1999; Bearman and Moody, 2004; Elliot et al. 1996; Kasarda and Janowitz 1974; Kingston et al. 2009; Sampson et al., 1999; Shaw and McKay 1942). However, it has been argued in family research that economic disadvantage is subjective depending on those contributing to the household income, the household size, and the number of children in the household (Edin and Kissane 2010; Roosa et al. 2005). Therefore, to incorporate the multidimensional aspects of economic disadvantage noted throughout both bodies of literature, the measure that operationalized economic disadvantage was created from many indicators. Each indicator was measured at Wave I and was self-reported by the parents of the adolescent.

To obtain an accurate depiction of actual economic disadvantage for each household, an economic disadvantage threshold measure was created. The economic disadvantage threshold measure includes the size of each household (number of adults and children) and the minimum income that the household would need to be considered above the economic disadvantage line (U.S. Census Bureau 1994). The household size was taken from twenty different questions that asked respondents to indicate the ages of persons in their household. Responses for household size ranged from 0 to 90. Persons who were 18 or older were counted as adults, and those 17 and younger were counted as children. Two separate variables were created from this information so that one variable would measure the total number of adults per household, and the other

variable would measure the total number of children per household. Because the data did not ask the respondent to include himself or herself, 1 was added to the summed number of children.

Household income was derived from a single measure that asked the respondents' parents, "About how much total income, before taxes, did your family receive in 1994? Include your own income, the income of everyone else in your household, and income from welfare benefits, dividends, and all other sources". Responses ranged from \$0 to \$999,000. The U.S. Census Bureau's 1994 income threshold chart was used to determine the economic disadvantage level threshold for each household by taking the number of adults, the number of children, and the minimum income that household would need to stay above economic disadvantage. These data were used to create a binary economic disadvantage threshold indicator. Households with income at or below the threshold were coded 1 to indicate economic disadvantage, while those with incomes above the threshold were coded 0 to indicate that they were not in economic disadvantage.

To account for more extreme measures of economic disadvantage, a series of questions asking the respondents' parents, "Did you or any member of your household receive...?" were also included in the analyses. These items included some form of state government assistance, such as supplemental security income (SSI), aid to families with dependent children, food stamps, unemployment, welfare, or housing subsidy/public housing. A binary variable was created to indicate if a respondent's household received one or more forms of assistance, with 1 coded as yes and 0 coded as no. An additional economic stress measure was included using a single question that asked the respondents' parents, "Did you ever feel you didn't have the money to pay your bills?" This question was also coded as a binary measure (0=no, 1=yes).

In alignment with prior research (Bearman and Moody 2004), parents' education and employment status were combined into a scale of family socioeconomic status (fSES). The fSES variable utilizes separate measures of mother's education, father's education, mother's occupation, and father's occupation (each coded as a 5-point scale, from low to high). These four summed scores then range from 1=low SES to 10=high SES. This was then reverse coded to 1=high SES to 10=low SES so that it would be in the same direction as the other economic disadvantage indicators.

A neighborhood economic disadvantage measure was created using the U.S. Census track data that examined the percentage of families below economic disadvantage residing in a given neighborhood. This measure is coded based on the proportions of persons with income in 1989 below the economic disadvantage level in each respondent's neighborhood. Neighborhood economic disadvantage was coded 1 (for 30% or more of families living at or below economic disadvantage level in the

respondent's neighborhood) and 0 (for 29% or fewer of families living at or below economic disadvantage level in the respondent's neighborhood).

All the aforementioned measures (economic disadvantage threshold; extreme measures of economic disadvantage; fSES; neighborhood economic disadvantage) were then standardized since they had different measurement metrics. Once standardized, these items were then scaled by taking the mean of the items and then multiplying by the number of items. This created one measure of economic disadvantage, a measure which includes all of the aforementioned dimensions of economic disadvantage.

Controls

Control variables were measured at Wave I and were self-reported. *Prior violent delinquency* was operationalized via the presence prior violent behavior. These were measured the same way as the outcomes mentioned earlier. The socio-demographic variables include race/ethnicity, gender, family structure, and age. Race and ethnicity were operationalized by four mutually-exclusive racial categories: White, Black, Hispanic/Latino origin, and Other. Three dummy variables (e.g. Black, Hispanic, and White) were created to model these categories, with White serving as the reference category. *Gender* was coded 1 for females and 0 for males with male as the reference group. *Family structure* variables were used to account for findings in previous literature that single parents are most likely to live in economic disadvantage (Petts 2009). A series of binary measures were created to operationalize family structure, and measured whether adolescents live with two biological parents, a stepfamily, a single mother, or a single father. Two-parent biological families served as the reference category. *Age* was calculated as the number of years between birth and the Wave I interview.

Other potentially important controls as outlined by previous literature are family support/coping, parental supervision, and parents' social capital. Family support is a key aspect of adolescent delinquency, as family support provides coping strategies for adolescents when they are dealing with difficulties (Anderson 1999). A five-item index for family social support was created from the following questions: (a) how much do you feel your parent cares about you; (b) your family understands you; (c) your family gives you attention; (d) your family has fun together, and; (e) you desire to leave home. Each of these items was coded 1 (for not at all) to 5 (for very much), with the exception that desire to leave home was reverse coded to that higher numbers indicate less desire to leave home. These five items were then summed, and the scale has a Cronbach's alpha of .76.

Parental supervision is important for keeping adolescents' behavior on task and ensuring they are completing their responsibilities (Anderson 1999). Following Demuth and Brown (2004), a parental supervision index was created for use in the current study. The parental supervision index includes seven items concerning family processes. Six

of the items were derived from the following questions: (a) how often is your mother home when you leave for school; (b) how often is your mother home when you return from school; (c) how often is your mother home when you go to bed; (d) how often is your father home when you leave for school; (e) how often is your father home when you return from school, and; (f) how often is your father home when you go to bed? These variables ranged from 0 (for never) to 4 (for always). The last item included in the index was taken from the question, "How often each week does at least one of your parents eat with you?" This was also measured on a metric ranging from 0 (for never) to 4 (for always). These seven items were summed, and the scale has a Cronbach's alpha of .79

In line with Coleman's (1988) social capital description, intergenerational closure was measured with a single item that asked parents the number of their child's friends' parents they had talked to in the previous four weeks. Possible responses ranged from 0=none to 6=six or more.

Analytical Methods

The analytical sample for this study includes respondents who have valid data for the key independent variables and for the dependent variable. For those who are missing on data that comprise the independent variables, the mean was imputed and this was backed up with the use of multiple imputation.

Tobit is intended for continuous data that are censored or bounded at a limiting value (DeMaris 2004), as is the case in this study. For measures of self-reported violent offending in Add Health data, there may be some response measures (e.g., measures of violent delinquency) that are not sensitive enough to pick up lower levels of the construct measuring delinquency. For example, if the respondent has shoved or pushed someone, this aggression could be classified as gateway violence, but would not be detected by the violence measures available in the Add Health data. Since the goal of the current study is to examine the full construct of those who are committing acts of delinquency, it would not be appropriate to apply OLS as coefficients from OLS will tend to be downwardly biased for the true effects of the regressors on the response. Tobit regression accounts for this as it provides unbiased estimates of regressor effects on the true underlying construct of interest (Breen 1996; DeMaris 2004).

Results:

Descriptive Statistics

Table 1 presents the descriptive statistics for all the variables used in the analysis. This table includes respondents from Waves I and II. The first variables of interest are those that comprise the dependent variable. As can be seen in Table 4.1, involvement

in delinquency for the full sample at Wave II varied depending on the type of crime. Adolescent violence was standardized.

Violence at Wave II has a standard deviation of 5.231. Additionally, 27 percent were involved in contact sports and 10 percent were involved in noncontact sports.

The sociodemographic characteristics of this sample indicate that approximately 52 percent of respondents in the sample were female, 54 percent were White, 22 percent were Black, 16 percent were Hispanic/Latino, and 8 percent were from other racial or ethnic classifications. Average age of respondents was 15.275 years old. About 50 percent of the respondents were residing with both biological parents, 16 percent were residing in stepfamilies, 25 percent were residing in single mother households, 4 percent were residing in single father households, and 6 percent were residing in other family structures.

Other control variables present in Table 4.1 indicate that on average, respondents feel that their family supports them ($M = 19.829$), given that the measurement metric ranged from 5 to 25. Parental supervision for the sample on average was 9.943, which suggests that respondents' parents are moderately supervising them. Social capital for the sample on average was 2.076, which is relatively low, with respect to the measurement metric of 0 to 6. Finally, the standard deviation of economic disadvantage was 5.190. This suggests that any given score of economic disadvantage can deviate from the mean plus or minus 5.190.

Variable	M	SD
Violence Wave 2	-0.123	3.35
Economic Disadvantage	2.355	6.134
Violence Wave 1	0.014	3.127
Performing Arts	0.331	0.048
Contact Sports	0.270	0.444
Non-Contact Sports	0.097	0.295
Academic Clubs	0.251	0.375
Female	0.552	0.497
Age At Wave 1	15.162	1.433
Biological Parents	0.296	0.456
Step Families	0.133	0.340
Single Mom	0.438	0.596
Single Dad	0.029	0.168
Other Parent	0.103	0.304
Family Support	19.959	3.585
Parental Supervision	9.921	2.220
n= 14,091		

Table 1 - Descriptive Statistics

Violence

Table 2 presents the Tobit regression results for the model that used sports as a moderator of the relationship between economic disadvantage and violence. Model 1 establishes a baseline for further analysis of the relationship between economic disadvantage and violence, controlling for Wave 1 violence. In Model 1, economic disadvantage is statistically associated with an increase in the respondent's violence by .067 units.

Model 2 of Table 2 added involvement in extracurricular activities to the equation; specifically, the variables of performing arts, contact sports, noncontact sports, and academic clubs were added to the model. Teens that are involved in performing arts had .353 less violence at the alpha level of .05. Participation in academic clubs lowers violence by .528 at the alpha level of .001. Teens involvement in contact sports had an increase in violence by .413, a value that is significant at an alpha level of .001. Teens involved in noncontact sports had a decrease in violence by .409, a value that is significant at an alpha level of .05.

In Model 3, the interaction terms between contact sports, noncontact, and economic disadvantage were added to the equation. None of the interactions were statistically significant.

Model 4 added controls for gender, age, race and ethnicity, family structure, family support, parental supervision, and social capital. The addition of these controls caused the interaction between contact sports and economic disadvantage to become statistically significant, which suggests that this effect was originally suppressed as a function of the controls. The interaction suggests that the effect of economic disadvantage for those who are involved in contact sports is .003. That is to say, that involvement in contact sports decreases the relationship between economic disadvantage and violence.

Predictors	Model 1		Model 2		Model 3		Model 4	
Intercept	-2.993	(.086)***	-2.493	(.096)***	-3.001	(.109)***	5.544	(.860)***
Economic Disadvantage	0.051	(.020)**	0.046	(.020)*	0.065	(.015)***	0.049	(.017)***
Violence Wave 1	0.826	(.014)***	0.856	(.015)***	0.977	(.019)***	0.887	(.019)***
Contact Sports			0.413	(0.130)***	0.412	(.130)***	0.121	(.134)
Non-Contact Sports			-0.312	(0.207)	-0.306	(.206)	0.051	(.208)
Performing Arts			-0.353	(0.149)*	-0.351	(.149)*	-0.034	(.154)
Academic Clubs			-0.528	(0.164)***	-0.531	(.164)***	-0.490	(.165)**
Contact sports*Economic Disadvantage					-0.040	(.027)	-0.052	(.026)*
Non-Contact sports*Economic Disadvantage					-0.039	(.039)	-0.047	(.039)
Performing arts*Economic Disadvantage					0.048	(.028)	0.049	(.028)
Academic Clubs*Economic Disadvantage					-0.001	(.032)	-0.015	(.033)
Female							-0.957	(.666)***
Age at Wave 1							-0.203	(.021)***
Black							0.440	(.085)***
Hispanic							0.382	(.089)***
Other Race							0.196	(.340)
Step Family							0.196	(.092)*
Single Mother							0.216	(.084)**
Single Father							0.466	(.196)*
Other Family Structure							0.567	(.153)***
Family Support							-0.078	(.009)***
Parental Supervision							0.012	(.016)
R ²	0.1001		0.1011		0.1012		0.1106	

N = 14,091 respondents; *p<0.05, ** p<0.01, ***p<0.001, + p<.1000

Discussion and Conclusions

There were a few limitations in this study that are noteworthy. This study relied on the Add Healthy dataset which is a school-base questionnaire; this creates a potential sample selection bias because it may exclude certain groups. Participation of these groups in certain extracurricular activities may have been excluded. However, it was found that teens who are poor exhibit less violence among those involved in contact sports once controls were added. Such findings are consistent with social control/bond theory on strain (Cernkovich and Giordano 1992; Darling et al. 2005; Mahoney and Stattin 2000), whereby those who participate in activities that strengthen relationships with peers and significant adults (e.g. parents, teachers, and coaches) have ways to cope with or manage stressful circumstances such as economic disadvantage. While it may be the case that these teens may have additional cumulative strains such as lack of parental supervision and have a single mother home, these teens may still find substitutes for this void such as coaches and teammates. Specifically, a coach may be seen as a father or mother figure for the adolescent. Teammates could be positive peers in the adolescent's life.

The final model indicated a number of main effects that may have contributed to the original suppression of contact sports as a function of the control variables pertaining to family processes that warrant further discussion, specifically to the effects of family support and single parent households. This may be important for future exploration especially due to the relationship with economic disadvantage.

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The criminal liability of the medical team considering the recent orientation of the Italian Court of Cassation

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Abstract

This article aims to analyze the thematic of medical team liability considering the recent Italian Supreme Court case-law, highlighting the various problems linked to the identification of the responsibility of each member of the team. The participation of several subjects in the execution of medical treatment makes the question of criminal liability very complex, especially when it comes to inauspicious events, such as injuries or death, occurring during medical treatment. The question concerns the exact identification of the duty of care and vigilance of the medical team and whether this duty is in line with the principle of individual criminal responsibility guaranteed by Article 27 of the Italian Constitution.

In this regard, the case-law has elaborated the so-called “principle of reasonable confidence”, according to which the division of labour that belongs to each member should involve a delimitation of his responsibility, limited only to what is within his competence, except in case of the person who organizes, directs, and controls the team. Precisely, based on this principle, the Italian Supreme Court in 2018 reasserted that in the medical team is necessary to identify the role played by each member, thus avoiding resorting to objective responsibility.

Keywords: medical team; medical liability; the principle of reasonable confidence; the principle of individual criminal responsibility.

Introduction

The Italian doctrine and case-law consider the medical team as the participation and collaboration of several health care professionals with different specializations in the execution of a specific medical health treatment, which interact with each other by operating at the same time (synchronous) or at different times (diachronic)¹. The participation of several physicians in a medical team in the execution of surgical

¹ See Cass. Pen., Sez. IV, 3 novembre 2011, n. 46961.; Cass. Pen., Sez. IV, 23 gennaio 2017-18 maggio 2018, n. 22007.

treatments makes it difficult to identify the criminal liability of each of the members for unfortunate events, such as injury or death, occurring during the medical treatment².

The principle of reasonable confidence, according to the Italian Court of Cassation

The questions on this issue relate to the exact identification of the duty of diligence and vigilance of each member of the medical team and whether this duty is in line with the principle of individual responsibility that characterizes the criminal law, according to Article 27, the first paragraph of the Italian Constitution.

In this sense, the adoption of the criteria of predictability and avoidance of the event as the key criteria of any culpable liability, are considered not sufficient to attribute the event to the members of the medical team³. As a matter of fact, in addition to the above requirements, it is necessary to also consider the peculiar nature of the medical activity. Thus, to determine and individualise the criminal liability of subjects who collaborate for a single result⁴, it is essential to identify other criteria.

About this issue, the recent doctrine and case-law have developed basic criteria to be taken into consideration to identify the medical liability. One of these principles is the “*principle of reasonable confidence*”⁵, based on which in the medical team activity, each of members is bound to follow the precautionary rules of his competence or specialization and confide in the fact that the other members will behave in the same way respecting the precautionary rules of their activity⁶. In this way, the principle of reasonable confidence delimits the amount of diligence of each doctor part of the team on the work of other healthcare professionals⁷.

In this sense, the Court of Cassation in the decision of 19 January 2018, no. 2354, re-affirmed that the principle of reasonable confidence can be applied: “*in every situation in which a plurality of subjects finds themselves operating to protect the*

² Ambrosetti, F. “La responsabilità penale dell’équipe”. *La responsabilità medica*, Tedeschini, N. Wolters Kluwer Italia S.r.l., Milano, 2016, p. 508.; Malavenda, A. F. “L’équipe medica”. *La responsabilità medica*, Tedeschini, N. Wolters Kluwer Italia S.r.l., Milano, 2016, pp. 766-770.

³ App. Bari, 26 gennaio 1981. *Foro it.*, 1983, II-V, p. 167, con nota di Belfiore, E.

⁴ Cass. Pen., Sez. IV, 23 gennaio 2017-18 maggio 2018, n. 22007.

⁵ See Cass. Pen., Sez. IV, 18 maggio 2018, n. 22007.; Cass. Pen., Sez. IV, 28 maggio 2008, n. 24360, Rago e altri. *Giur. it.*, 2009, 4, p. 948.; Pret. Bologna, 31 maggio 1996, Martinelli ed al. *Riv. it. dir. proc. pen.*, 1997, p. 1043.; Cass. Pen., 20 marzo 1991. *Cass. pen.*, 1992, p. 2754.; Mantovani, M. “La responsabilità penale nell’attività medico-chirurgica in équipe fra teoria e prassi”. *Nuova giur. civ. comm.*, 2010, p. 1169.; Ambrosetti, F. “La responsabilità”, *cit.*, p. 508.; Di Pentima, M. G. *La responsabilità per l’attività sanitaria in équipe*, Giappichelli Editore, Torino, 2009, p. 153.; Malavenda, A. F. “L’équipe medica”, *cit.*, p. 766.; Risicato, L. *L’attività medica di equipe tra affidamento ed obblighi di controllo reciproco*, Giappichelli Editore, Milano, 2013, p. 40.; Fortunato, G. “Ancora sul principio di affidamento e l’équipe medica”. *Dir. Pen. Cont.*, 2017, 5, p. 31.

⁶ Lanza, E. “La responsabilità penale del medico negli orientamenti della dottrina e della giurisprudenza”. *La responsabilità in ambito sanitario*, Aleo, S., De Matteis, R., Vecchio, G., II, Padova, 2014, p. 701.

⁷ Mantovani, F. “Il principio di affidamento nel diritto penale”. *Riv. it. dir. e proc. pen.*, 02, p. 536.; Mantovani, F. *Diritto penale*, Padova, 2007, p. 174.; Terrizzi, A. L. “Linee guida e saperi scientifici “interferenti”, la Cassazione continua a non applicare la legge Gelli-Bianco”. *Dir. pen. cont.*, 2018, n. 7, p. 104.

same legal asset based on specific duties divided between them. (...) Thus configured, the principle of reasonable confidence serves as a limit to the obligation of diligence imposed on each holder of the guarantee position”⁸.

Considering this principle, the division of labour incumbent on each of the doctors should entail a delimitation of his responsibility, limited only to what is within his competence⁹, except for the person who organizes, directs, and controls the medical team. Otherwise, we had to admit the doctor’s criminal liability also for the work of others, when the conduct or omission does not fall within his area of competence, in violation of the principle of individual criminal responsibility guaranteed by Article 27, paragraph 1, of the Italian Constitution¹⁰.

Well, for this reason, the recent case-law considers the principle of reasonable confidence an acceptable choice which is part of the living law¹¹, also because, as we can see, the delimitation of the responsibility of each of the participants of the medical team, within the limits of their specific tasks, is in line with the principle of individual criminal responsibility: *“under which each member is liable for the consequences of his conduct, whether actions or omissions and within the scope of his knowledge and specialization, while it is not liable, however, for any violation of the precautionary rules by others”¹².*

The Italian Court of Cassation re-affirmed the position above mentioned, observing that the principle of reasonable confidence represents a safety factor since each of the members of the team is left free to carry out his work based on his specific specialization by following the rules of diligence, prudence and expertise required. But on the other side, the Court recognizes that it also represents a risk factor, since the medical team activity needs the collaboration and coordination of each of the members who have *“shared obligations”* to a single result¹³.

In the same way the Italian Supreme Court in the decision of May 31, 2017, no. 27314, considering the foregoing, states the need for a balance between the principle of self-responsibility and the principle of reasonable confidence¹⁴. On the one hand, every

⁸ Cass. Sez. IV, 19 gennaio 2018, 2345: <https://renatodisa.com/corte-cassazione-sezione-quarta-penale-sentenza-19-gennaio-2018-n-2354-nelle-ipotesi-trattamenti-sanitari-affidati-ad-pluralita-medici/>.

⁹ See Cass., 13 giugno 1996. *Foro it.*, 1997, II, p. 417.; Cass., 15 luglio 1991. *Giust. pen.*, 1992, II, p. 223.; Vallini, A. “Cooperazione e concause in ipotesi di trattamento sanitario “diacronicamente plurisoggettivo”. *Dir. pen. proc.*, 2001, p. 480.

¹⁰ See Ambrosetti, F. *La responsabilità penale*, cit., p. 513.; Cass. Pen., Sez. IV, 19 gennaio 2018, n. 2354.

¹¹ Cass. Pen., 19 luglio - 4 settembre 2018, n. 39733.; Cass. Pen., 23 gennaio 2017-18 maggio 2018, n. 22007.; Cass. Pen., 19 gennaio 2018, n. 2354.; Cass. Pen., 31 maggio 2017, n. 27314.; Cass. Pen., Sez. IV, 3 novembre 2011, n. 46961.

¹² Cass. Pen., Sez. IV, 28 maggio 2008, n. 24360, cit.; Cass. Pen., 22 maggio 2009, n. 32191.; Cass., sez. IV, 21 maggio 2017, n. 27314.; Cass. Pen., 18 dicembre 2009, dep. 26 gennaio 2010, n. 3365.; Cass. Pen., 18 dicembre 2009, dep. 26 gennaio 2010, n. 3365.; Marinucci, G. and Marrubini, G. “Profili penalistici del lavoro medico – chirurgico in équipe”. *Temi*, 1968, p. 217.; Belfiore, E. “Sulla responsabilità colposa nell’ambito dell’attività medico – chirurgica in équipe”. *Foro it.*, 1983, II-V, p. 167.

¹³ Cass. Pen., Sez. IV, 11 ottobre 2007, n. 41317. *Ragiusan*, 2008, pp. 287-288 and: <http://dejure.giuffre.it>.

¹⁴ Cass. Pen., Sez. IV, n. 27314, 31 maggio 2017: http://www.anaao.it/public/aaa_9434656_casspen_27314_2017.pdf.

doctor part of the team is free to carry out his duties, relying on the respect of the medical rules (*leges artis*) by the other members of the team and on the other, each member must supervise the work of others, where the skills allow it¹⁵. Therefore, in the opinion of the Court, the obligation to supervise the others' actions must not be transformed into "*a sort of generalized obligation*", risking to "*invade the areas of competence of others*".¹⁶

For this reason, the medical activity carried out by a team is considered a collaboration of several specialists, on an equal basis, where each member must entrust in the diligent and correct behaviour of his colleagues¹⁷. However, it is essential to emphasize that: in this group activity, generic diligence must not fail, especially when there are subjective and objective circumstances that indicate doubts on the conduct of the work diligently and correctly by the colleagues¹⁸. According to a part of the doctrine, the concepts of predictability and avoidance of the event are concepts that integrate the principle of reasonable confidence¹⁹. It also stated that each doctor part of a team is bound to observe the rules related to his area of competence, thus perform his duties correctly, in a qualified and responsible manner. This is a primary obligation of each member of the medical team. Instead, the obligation to control the work of others represents a secondary and eventual obligation, that depends on the tasks that each of the team members occupies within the group²⁰.

In this regard, the Italian Court of Cassation, in the decision of 19 January 2018, no. 2354, reaffirms the previous case-law orientation on the principle of reasonable confidence. The Court states that to identify the criminal liability of the doctor, part of the medical team due to the unfortunate outcome of the intervention, it is necessary to carry out a careful analysis of the duties of each of the components and the contribution of each of them to the occurrence of the harmful event. In such a way as to exclude the *a priori* liability of the entire medical team and consequently the objective liability of the same²¹.

In this sense, healthcare professionals are required to carry out their activities according to the canons of medical science, protocols and guidelines as provided for

¹⁵ Ambosetti, F. *La responsabilità penale*, cit., p. 508.

¹⁶ See Cass. Pen., Sez. IV, 31 maggio 2017, n. 27314.; In the same direction Cass. Pen., Sez. IV, 30 marzo 2016, n. 18780.

¹⁷ Cfr. Risicato, L. "Omesso controllo sul malgoverno di macchinari capricciosi: non c'è responsabilità penale del dirigente medico". *Giur. it.*, giugno 2016, p. 1490.

¹⁸ Bilancetti, M. and Bilancetti, F. *La responsabilità penale e civile del medico*, Cedam, Padova, 2013, p. 881.; Cass. Pen., 18 maggio 2018, n. 22007, cit.

¹⁹ *Ibid.*; Di Pentima, M. G. *La responsabilità cit.*, p. 157.

²⁰ In this sense Risicato, L. *L'attività medica*, cit., pp. 42-43.; Roiati, A. *Medicina difensiva e colpa professionale medica in diritto penale*, Milano, 2012, p. 257.; Mantovani, M. *Il principio di affidamento nella teoria del reato colposo*, Giuffrè Editore, Milano, 1997, p. 155.; Belfiore, E. *Sulla responsabilità colposa*, cit., p. 168.

²¹ Cass. Pen., Sez. IV, 19 gennaio 2018, n. 2354.

by the Gelli-Bianco Law no. 24/17, which introduced in the Italian Criminal Code the article 590 *sexies*, reforming the liability of the health care workers²².

An important objection - among many - to the Gelli - Bianco Law concerns the second paragraph of art. 590 *sexies*, which provides for the exclusion of medical liability due to inexperience of the doctor who acts in compliance with best practices and guidelines published by law²³ or in any case accredited by the scientific community, except in cases where the situation of the patient requires a different behaviour. It is necessary to note that the Gelli-Bianco Law presents the same perplexities that also concern the Balduzzi Law²⁴. The doctrine notes in this sense the risk that the guidelines or best medical practices recognized and published under the law, from “*simple recommendations become legal prescriptions*”²⁵, and may hide, or justify the negligent behaviour of doctors²⁶. On the other hand, the Italian Supreme Court case-law has affirmed constantly that the cases in which the guidelines are considered binding precautionary rules for the doctor are rare, due to the difficulty of standardizing medical activity, bearing in mind the scientific evolution and existence of alternative therapies characterized by the same scientific foundation²⁷.

²² Cfr. Romano, B. “La responsabilità penale dell’esercente la professione sanitaria, tra antichi dubbi e nuovi problemi”. *Dir. pen. cont.*, 16 novembre 2018: <https://archiviopdc.dirittopenaleuomo.org/upload/8372-romano2018a.pdf>; Cass. Sez. IV, 20 aprile 2017, n. 28187, Tarabori.; Cupelli, C. “La legge Gelli-Bianco e il primo vaglio della Cassazione: linee guida sì, ma con giudizio”. *Dir. pen. cont.*, n. 6, 2018, p. 280.; Piras, P. “Il discreto invito della giurisprudenza a fare noi la riforma della colpa medica”. *Dir. pen. Cont.*, 4 luglio 2017: https://archiviopdc.dirittopenaleuomo.org/upload/PIRAS_2017b.pdf; Caletti, G. M. and Matheudakis, M. L. “La Cassazione e il grado della colpa penale del sanitario dopo la riforma “Gelli – Bianco”. *Dir. proc. pen.*, 2017, p. 1396.

²³ See Matheudakis, M. L. “La punibilità della colpa penale relazionale del sanitario dopo la riforma “Gelli-Bianco”. *Dir. pen. cont.*, 4, 2019, pp. 65-80: https://dpc-rivista-trimestrale.criminaljusticenetwork.eu/pdf/DPC_Riv_Trim_4_2019_Matheudakis.pdf; Caletti, G. M. “Il percorso di depenalizzazione dell’errore medico”. *Dir. pen. cont.*, 4, 2019, pp. 15-16: https://dpc-rivista-trimestrale.criminaljusticenetwork.eu/pdf/DPC_Riv_Trim_4_2019_Caletti.pdf; Cfr. Cupelli, C. “La responsabilità penale degli operatori sanitari e le incerte novità della legge Gelli-Bianco”. *Cass. Pen.*, 2017, pp. 1765-1970.

²⁴ Caletti, G. M. “Il percorso di depenalizzazione dell’errore medico”. *cit.*, pp. 7-8, 12-15.; Blaiotta, R. “Niente resurrezioni, per favore. A proposito di S.U. Mariotti in tema di responsabilità medica”. *Dir. pen. cont.*, 28 maggio 2018: <https://archiviopdc.dirittopenaleuomo.org/upload/2125-blaiotta2018a.pdf>; Civello, C. “Responsabilità medica e rispetto delle “linee guida” tra colpa grave e colpa lieve (la nuova disposizione del decreto sanità)”. *Arch. pen.*, 2013, n. 1.; De Francesco, G. “Al capezzale della colpa medica”. *Riv. it. med. leg.*, 2015, 3, pp. 884-889.

²⁵ *Ibid.* p. 3.; Brusco, C. “Cassazione e responsabilità penale del medico. Tipicità e determinatezza nel nuovo art. 590 *sexies* c.p.” *Dir. pen. cont.*, 11, 2017, pp. 211-219: <https://archiviopdc.dirittopenaleuomo.org/upload/6599-brusco1117.pdf>; Di Landro, A. R. *Dalle linee guida e dai protocolli all’individuazione della colpa penale nel settore sanitario*, Giappichelli Editore, Torino, 2012, pp. 310-320.

²⁶ Guerriero, C. *Il disegno di legge Gelli cambia i connotati della responsabilità medica*, 16 febbraio 2016: www.iurisprudenzia.it.

²⁷ Caletti, G. M. “Il percorso di depenalizzazione dell’errore medico”, *cit.*, pp. 8-11.; Campana, T. “La correlazione tra inosservanza e/o applicazione delle “linee guida” e responsabilità penale del medico”. *Cass. pen.*, 2012, p. 550.; Palazzo, F. “Responsabilità medica, «disagio» professionale e riforme penali”. *Dir. pen. proc.*, 2009, 9, pp. 1063-1066.; Di Giovine, O. “La responsabilità penale del medico: dalle regole ai casi”. *Riv. it. med. leg.*, 2013, 1, pp. 61-66.

The limits imposed on the principle of reasonable confidence

The principle of reasonable confidence, despite being considered a guiding criterion in the medical team activity, encounters some specific limits²⁸. In the first place, it does not operate against the person who is at fault, for the violation of the precautionary rules or the omission of the necessary conduct²⁹. Furthermore, the full application of the principle of reasonable confidence, as the Court of Cassation also underlined: “*could entail the risk that each doctor part of the team could be completely disinterested in the work of others, and this could lead to defects in cooperation between doctors*”³⁰.

Another limit to the principle of reasonable confidence is the “*basic choice*” relevant for the intervention, a choice that is shared by all doctors’ part of the team. Moreover, if this choice is wrong or guilty, all the doctors who make up the team are to be held responsible³¹.

The last limit placed on the application of the principle of reasonable confidence concerns the subject who is in a special position in the hierarchy, such as the head of the medical team, who organizes, controls, and supervises the other collaborators. In this context, the head of the team holds the position of guarantee for the protection of the patient’s health³²; consequently, he has the legal obligation to control and supervise the work of the other components³³.

Regarding the medical team liability, the Italian Supreme Court case-law has developed another guiding criterion the so-called “*evident error*”. According to this criterion, every doctor is responsible not only for the compliance with the rules of diligence and expertise related to his specific tasks, but he must also know and evaluate the activities carried out by colleagues, to remedy the errors made by them if they are

²⁸ Regarding the principle of reasonable confidence see: Buzzoni, A. “*Responsabilità medica in équipe: gli orientamenti giurisprudenziali*”, 16 settembre 2006, p. 2: <https://www.altalex.com/documents/news/2006/10/11/responsabilita-medica-in-equipe-gli-orientamenti-giurisprudenziali>.

²⁹ Cass. Pen., 18 dicembre 2009 dep. 26 gennaio 2010, n. 3365: “*il principio di affidamento non è, però, invocabile sempre e comunque (...). Non è certamente invocabile, infatti, allorché l'altrui condotta colposa si innesti sull'inosservanza di una regola precauzionale proprio da chi invoca il principio: ossia allorché l'altrui condotta colposa abbia la sua causa proprio nel non rispetto di norme cautelari, o specifiche o comuni, da parte di chi vorrebbe che quel principio operasse*”; Cass. Pen., Sez. IV, 28 maggio 2008, n. 24360; Cass. Pen., 18 maggio 2005, n. 18568.

³⁰ Cass. Pen., Sez. IV, 19 gennaio 2018, n. 2354.

³¹ Cass. Pen., Sez. IV, 3 novembre 2011, n. 46961. *Pers. e danno*, 24 gennaio 2012.; Article 14, *Codice di Deontologia Medica*, 2014: “*la rilevazione, la segnalazione e la valutazione di eventi sentinella, errori, quasi – errori, ed aventi avversi valutando le cause e garantendo la natura riservata e confidenziale delle informazioni raccolte*”; Cfr. Cass. Pen., Sez. IV, 21 gennaio 2016 ud. 3 dicembre 2015, n. 2541. *Giur. it.*, giugno 2016, p. 1490, con nota di Riscato L.

³² Cass. Pen., Sez. IV, n. 32871/2020.; Cass. Pen., Sez. IV, 6 marzo 2012, n. 17222. *Danno e resp.*, 2012, 7, p. 805.; Cass. Pen., Sez. IV, 12 febbraio 2010, n. 20584, T.G. e altro. *Guida al dir.*, 2010, p. 92.; Malavenda, A. F. “*L'équipe medica*”, cit., p. 767.

³³ Cass. Pen., Sez. IV, 3 novembre 2011, n. 46961.; Cass., sez. IV, 26 ottobre 2011, n. 46824. *CED Cass.*, rv. 252140.; Cass., 29 novembre 2010, n. 24144.; Cass., 2 dicembre 2008, n. 1866. *Riv. it. med. leg.*, 2009, p. 1117.; Cass. Pen., Sez. IV, 1° dicembre 2004, n. 9739.; Belfiore, E. “*Profili penali dell'attività medico – chirurgica in équipe*”. *Arch. pen.*, 1986, pp. 298-295.; Di Pentima, M. G. *La responsabilità. cit.*, pp. 131-139.; Ambrosetti, F., Piccinelli, M., Piccinelli, R., *La responsabilità nel lavoro medico d'équipe*, Utet, Torino, 2003, pp. 102-130.; Di Pentima, M. G. *La responsabilità. cit.*, pp. 118-120.

obvious errors to a reasonably prudent professional. This orientation was recently reaffirmed by the Court of Cassation with the decision of 18 May 2018, no. 22007, where: *“In terms of medical liability, the team must be considered as a single and compact entity and not as a community of professionals, in which each one is limited to carrying out his duties. It follows that the duty of care which is attributable to each component of the medical team concerns not only the specific tasks assigned to him but also the control over the work and the errors of others that are evident and not sectoral, as such perceptible with the help of the common knowledge of a reasonably prudent professional.”*³⁴.

It is therefore evident that the members of a medical team who cooperate in medical-surgical activity, even if in different sectors, are required to observe the obligations arising from the convergence of all activities towards the common goal which is to safeguard patient health. Accordingly, the members of the team, even if they do not have the specific knowledge of a certain sector of the colleague, can remedy the so-called *“evident errors”*, which are perceptible with the necessary diligence and experience of a reasonably prudent professional³⁵. In this direction, the Court of Cassation in 2006 asserted that: *“the team member is liable not only for the fact he directly caused but also for the fact committed by another member if he had the concrete possibility to supervise the work and prevent his mistakes”*³⁶. The procedure is different if the errors are related to specific sectoral knowledge, which are considered not evident, and therefore, not perceptible with the knowledge of a reasonably prudent professional³⁷. The most frequent cases in terms of medical team liability are the forgetfulness of foreign bodies in the patient’s abdomen, such as gauze or irons. In this regard, the Italian Supreme Court has ruled that the obligation to remove the irons belongs to the entire operating team since all the doctors who are part of the team are responsible for the success of the operation. This obligation cannot be delegated to nurses or paramedics since the latter has only the task of assistance and not of verification³⁸.

Reflections on the configuration of Article 113 Italian Criminal Code

The application of Article 113 of the Italian Criminal Code in case of surgery performed by a team, is a very discussed topic in doctrine³⁹. However, the doctrinal orientations

³⁴ Cass. Pen., Sez. IV, 18 maggio 2018, n. 22007: <https://www.lexopera.it/wp-content/uploads/2018/05/cass-22007-2018.pdf>; Cass. Pen., Sez. IV, 30 marzo 2016, n. 18780; Cass. Sez. III, 1° febbraio 2011, n. 2334. *Pers. e danno*, 22 aprile 2011.; Cass. Pen., Sez. IV, 12 luglio 2006, n. 33619.; Di Pentima, M. G. *La responsabilità. cit.*, pp. 155-163.

³⁵ Cass. Pen., Sez. IV, n. 53315, 18 ottobre 2016.; Cass. Pen., n. 22007, 18 maggio 2018.; Cass., Sez. IV, 24 gennaio 2005, n. 18548.

³⁶ Cass. Pen., Sez. IV, 12 luglio 2006, n. 33619.

³⁷ Cass. Pen., Sez. IV, 22 maggio 2009, n. 32191. *Guida al dir.*, 2009, p. 94.; Cass. Pen., 18 dicembre 2009, dep. 26 gennaio 2010, n. 3365.

³⁸ Cass. Pen., Sez. IV, 26 maggio 2004, n. 39062, P.S. e altro. *Dir. pen. proc.*, 2005, p. 27; Cass. Pen., Sez. IV, 6 aprile 2005, n. 22579, Malinconico e altro. *Riv. pen.*, 2006, 7-8, p. 877.

³⁹ Cfr. Belfiore, E. *Profili penali, cit.*, pp. 266-270.; *Id.*, *Sulla responsabilità colposa, cit.*, pp. 169-170.

and even the Supreme Court case-law do not offer a univocal solution. A part of the most authoritative doctrine considers co-offending in crime under article 113 of the Italian Criminal Code⁴⁰.

It will be interesting to see whether the activity of the doctor who does not supervise the conduct of others can be defined indirectly or atypically negligent according to Article 113 of the Italian Criminal Code⁴¹. Therefore, is this approach in line with the principle of individual criminal responsibility under Article 27 of the Italian Constitution?

The answer to this question comes from the Supreme Court case-law, which seems to exclude the application of Article 113 of the Italian Criminal Code concerning medical team activities. In this context, the Court of Cassation recognizes that negligent co-offending occurs when several people carry out "*an autonomous conduct, in the mutual awareness of contributing, with the conduct or omission of others, to the production of the unwanted event*"⁴², but still predictable. It is therefore considered essential that each culpable conduct is directly connected to the risk of the damaging event, representing an unequivocal causal antecedent⁴³.

A better approach to the question of medical team liability for negligent co-offending is offered by the doctrinal elaboration and Italian Supreme Court case-law, according to which negligent actions are involved when:

- The negligent act is the result of several parties who acted independently of each other⁴⁴.
- The event is the result of the conscious and negligent conduct of several people⁴⁵.

In the first case, it is not necessary for the participants being aware that the event may result from their joint action. According to the doctrine⁴⁶, in this hypothesis, the responsibility of each participant is identified based on the general principle of factual causation. In the second hypothesis, however, the conduct of each competitor must be marked by the violation of a precautionary rule and by interacting in a coordinated

⁴⁰ Bilancetti, M. and Bilancetti, F. *La responsabilità penale cit.*, pp. 863-880.

⁴¹ Cognetta, G. "La cooperazione nel delitto colposo". *Riv. it. dir. proc. pen.*, 1980, p. 63.; Riscato, L. *L'attività medica di equipe, cit.*, p. 19.; Cass., 7 aprile 2004, n. 25311.

⁴² Cass. pen., sez. IV, 12 febbraio 2013, n. 16978, *Porcu*.

⁴³ Di Landro, A. R. *Dalle linee guida, cit.*, p. 310.; Cfr. Di Pentima, M. G. *La responsabilità. cit.*, pp. 196-200.; Cass. pen., sez. IV, 10 dicembre 2009, n. 6215, *Pappadà e altri*.

⁴⁴ In this sense Cass. Sez. IV, 4 ottobre 2012, n.11439. *CED Cass. rv. 255419*.

⁴⁵ Bettiol, G. "Sul concorso di più persone nei delitti colposi". *Scritti giuridici*, I, Padova, 1966, p. 18.; Pagliaro, A. *Principi di diritto penale*, Milano, 2000, pp. 545-550.; Latagliata, V. voce "Cooperazione nel delitto colposo". *Enc. del Dir.*, Ed X, 1962, p. 615.; Di Pentima, M. G. *La responsabilità. cit.*, p. 194.; Bilancetti, M. and Bilancetti, F. *La responsabilità penale cit.*, pp. 863-880.; See Cass. Sez. III, 9 gennaio 2009, n.15707, *Abbanneo*. *Cass. Pen.* 2010, p. 626.

⁴⁶ Padovani, T. *Codice penale*, Milano, 2005, p. 615.; Di Benedetto, S. *La cooperazione nel delitto colposo*, Milano, 1988, p. 94.; Fiandaca, G. and Musco, E. *Diritto penale, parte generale*, IV Ed, Bologna 2007, p. 496.

and conscious way, therefore it is the psychological element that characterizes the co-offending referred to Article 113 of the Italian Criminal Code⁴⁷.

However, if we refer to the case-law, we can note that in some cases the Italian Supreme Court has argued that medical-surgical team treatment configures co-offending according to Article 113 of the Italian Criminal Code. In this direction, the Court of Cassation affirmed the responsibility of all members of the medical team for the failure of the operation which resulted in damage to the patient's health, attributable to erroneous basic choices shared by all participants⁴⁸.

In this regard, the Italian Court of Cassation in a case related to the breaking, during a surgical operation of the abdomen, off the edge of the forceps and its sliding into the patient's abdomen, constitute guilty conduct by the doctors, in terms of the failure to count the irons after the wound was sutured. Or, when the Italian Supreme Court notices the medical negligence, under the profile of co-offending according to Article 113 of the Italian Criminal Code of the medical director of a retirement home, who had not checked and supervised that the provisions he had given were observed, by the top position invested⁴⁹.

Conclusions

In conclusion, it is noted that the greatest perplexities on the issue of medical team criminal liability relate to the principle of reasonable confidence and the risks deriving from it. In this sense, it must be admitted that every professional must be left free to perform his duties and respect the rules of diligence and prudence linked to his specific specialization. In this regard, each member of the medical team entrusts in the fact that his colleagues will respect the medical rules (*leges artis*), since a doctor part of a team cannot know and evaluate all the previous and/or contextual activities of each of the components in the different areas of specialization. However, on the other hand, such a statement risks entailing the mere disinterest of individual doctors in the work of other colleagues. Therefore, it is necessary to integrate the principle of reasonable confidence with the obligation to supervise or correct the work of the other members of the medical team, where knowledge allows it, especially if it is a matter of gross errors or inexperience's that could compromise the functionality of the entire team.

⁴⁷ Cass., Sez. VI, 14 maggio 2009, n. 20406.; Cass., Sez. III, 9 gennaio 2009, n. 15707, Abbaneo, Cass. Pen., 2010, p. 626.

⁴⁸ Cass. Pen., Sez. IV, 3 novembre 2011, n. 46961, *cit.*; Cass. Pen., 18 dicembre 2009, n. 3365, dep. 26 gennaio 2010.; Tribunale di Milano, Sez. IX, 16 luglio 2007, 13 ottobre 2007. *De Jure e Foro Ambros*, 2007, 3, p. 323, and *Riv. it. med. leg.*, 2009, 1, p. 233.; Tribunale di Caltanissetta, 15 gennaio 2003, S e altro. *Foro it.*, 2005, II, p. 621.; Cass. Pen., 4 febbraio 2004, Caffaz e altro.; Trib. Massa, 15 dicembre 2000, Caffaz e altro. *Riv. pen.*, 2002, p. 73.; Tribunale di Perugia, 15 gennaio 2002, Casciola e altro. *Riv. pen.*, 2002, p. 394.; Cass. 29 novembre 1988. *Cass. pen.*, 1990, p. 245.; Cass. 13 giugno 1983. *Cass. pen.*, 1984, p. 1965.

⁴⁹ App. Milano, 12 ottobre 1999.; Pret. Genova, 13 novembre 1991. *Foro it.*, 1992, II, 586.; Cfr. Pretura Vibo Valentia, 15 marzo 1999, Garuzzo e altro. *Riv. it. med. leg.*, 2000, p. 875.

The Court of Cassation accurately recalls that the obligation to supervise the work of other colleagues within the team must not be transformed into an unlimited obligation for the doctors. But it is necessary to carry out a careful assessment of the role played by each member and verify the incidence of each person's conduct on the injurious event. Thus, avoiding attributing the criminal liability to the entire medical team, with the risk of falling back into the area of objective liability, in violation of Article 27 of the Italian Constitution.

The medical-surgical treatment carried out by a team presents a multiplicity of problems related to the identification of the criminal liability of the individual components. For this reason, it is important to balance the principle of reasonable confidence and the principle of self-responsibility, to exclude the attribution of the criminal liability *a priori* for the entire team and at the same time fulfilling the obligation to guarantee the patient's health.

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Locus of control and culture of poverty.

An appraisal of Lawrence M. Mead's ideas in 'Culture and Poverty'

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Abstract

Lawrence M. Mead presented an interesting argument as to why poverty exists in the United States. He problematizes the culture of the poor of which ethnic minorities over-represent. By referring to the geographic regions from which these ethnic minorities came from, he globalised the question of poverty in the US. This invites a global policy debate rather than a US-centric policy debate. Indeed, Mead so freely made references to Africa and the African culture severally throughout his commentary. It is against this backdrop that I show that Mead was right to a large extent on the question of inner-driven individualised orientation. However, he overestimates its influence and misreads what culture is. He presented the culture of poverty as the antecedent of poverty. It was concluded that manipulating both internal drive (internal locus of control) and the structure of society is a more effective way to tackle poverty.

Keywords: locus of control; culture of poverty; personality; poverty.

Poverty is a phenomenon that has received public attention both at the level of public debate and public policy. Poverty can be and has been weaponized for political victory, public policy reforms, violence and stereotyping. Many attempts have been made in different geographic regions of the world to tackle with, recording varying degrees of success and failures. No single solution to poverty has been found given that in the midst of plenty people still lack (Mead, 2020). Thus, the debate about where poverty comes from continues unabated. In this commentary, I argue that, to a large extent, Mead was right that inner-driven individualised orientation may have something to do with poverty. Nonetheless, he overestimates its influence. Again, Mead misreads what culture is and presents it as a fossilised worldview that has no antecedent or origin; it is as if culture came into being without a cause. Similarly, he presented the culture of poverty as the antecedent of poverty. I rather show that culture of poverty is a consequence of and the sustaining force of a vicious cycle of poverty. I come into this public policy debate as a critical African psychologist whose geographic region of origin has been called out in a poverty policy debate in the United States. Mead's article was published on July 21, 2020. An editorial note referring to concerns raised about the article was published on the journal's website on July 29, 2020. The journal was subsequently retracted by the publisher and Editor-in-Chief on July 31, 2020.

In spite of its retraction, I still think that an appraisal of Mead's ideas in the paper is necessary as it may incidentally reflect views held by other like-minded scholars, policy makers, and politicians. This is because the retraction does not prevent other forms of expression of those ideas. In fact, those ideas can still be used in policy circles. Again, 10 days (from July 21 to 31, 2020) are long enough for a lot of people to have read, digested, and internalised his views. This implies that a commentary is still needed. In a nutshell, I contend that culture of poverty is a consequence of and the sustaining force of a vicious cycle of poverty.

Agreeing with Lawrence M. Mead

Mead's idea of inner-driven, moralistic orientation is roughly equivalent to what we call internal locus of control in psychology. Locus of control relates to the extent to which individuals attribute success or failures to inner dispositions (internal locus of control) or to situational factors including luck and powerful others such as God (external locus of control) (Rotter, 1966). Subsequently, two forms of locus of control have been identified (Rotter, 1966; Wang et al., 2010), namely: internal locus of control and external locus of control. Generally, individuals with internal locus of control attribute their life outcomes to their own efforts and actions. Such persons tend to blame themselves rather than situations or others for their failures. As a result, they see a link between their actions and consequences. They tend to think that their efforts matter as far as their life outcomes are concerned. Owing to this, they take responsibility for their actions.

On the other hand, individuals with external locus of control tend to hold the belief that there is no link between their own actions and life outcomes. In some sense, persons with an external locus of control tend to think the environment, circumstances, a higher being (God or gods or evil forces), and very powerful people determine or control their destiny. Such mind-set results in people taking less responsibility for their actions. They tend to think that their actions will not change the circumstances of their lives. In many ways, they will easily give up even when their actions can change something in their lives. They are quick to blame everyone else but themselves for their failures.

What is generally understood from prospective cohort studies in developmental psychology and the social sciences is that positive self-perceptions and self-awareness (including locus of control) established in early childhood influence adult self-perceptions (Orth, 2018) as well as adult socioeconomic outcomes (including income, having a top job, wealth, and education) (Goodman et al., 2015). Evidence derived from outside developmental psychology also collaborates the locus of control-socioeconomic outcomes associations; locus of control influences attributions of poverty while accounting for differences in education, income levels, parental

investment, job search behaviour, health, and financial behaviour (Caliendo et al., 2010; Heaven, 1989; Nasser & Abouchedid, 2006; Ross, 2018).

Again, there is also evidence that parental self-perception and family environment influence self-perceptions children develop and children's self-perceptions influence their career aspirations (Bandura et al., 2001). In effect, locus of control forms during early childhood and persists throughout the life course of an individual and that the immediate family environment (including poverty and parental locus of control) influences the development of a child's locus of control. Thus, there is no doubt that there is intergeneration transmission of such self-perceptions from parents to children (Oppong, 2014; Ross, 2018). However, Ross shows that the locus of control has ancestral roots such that ancestral control over subsistence (dependence on agriculture for subsistence and more variable inter-annual rainfall) results in external locus of control (Ross, 2018). This further suggests that locus of control correlates with learned helplessness – the belief that one's actions will not matter even in situations when one's actions can change life outcomes (Oppong, 2014).

Cross-cultural differences in locus of control appear to exist (Hizing, 2015; Medinnus et al., 1983; Ross, 2018; Stocks et al., 2012). However, the evidence is still inconclusive (Furnham and Henry, 1980; Hui, 1982). What we know is that once the participants are sufficiently matched with respect to age, sex, education, occupation, homogeneity, living conditions, language competence and other relevant demographic characteristics, the cross-cultural differences disappear (Furnham & Henry, 1980). Others have also argued that the cross-cultural differences in locus of control are more due to the influence of life circumstances and parental antecedents on locus of control (Medinnus et al., 1983) and methodological flaws in the measurement of locus of control (Hui, 1982). In some cases, rather unexpected results were documented. For instance, Stocks and colleagues found that Southern Africans had higher levels of internal locus of control in comparison to Chinese participants (Stocks et al., 2012). This further complicates the nature of the cross-cultural differences in locus of control.

In a qualitative study in Ghana about the meaning of successful life and its pathways, many attributed success to divine blessings as opposed to personal strivings, implying an external locus of control (Osei-Tutu et al., 2018). However, when one examines the participant characteristics, they appear not to be largely individuals with higher income. What we can, therefore, say is that locus of control is generally associated with socioeconomic status more than culture. Rich people everywhere tend to have high internal locus of control, whether they reside in Africa or the United States. Thus, Mead is right insofar as he links locus of control to poverty but it becomes problematic when he assumes that locus of control is an attribute of culture. Locus of control is not an attribute of culture but personality.

Disagreeing with Lawrence M. Mead

In Mead's analysis, culture is problematized as the antecedent of poverty. This then begs the question what culture itself is. Spencer-Oatey (2008, p.3) conceptualizes culture as "a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member's behaviour and his/her interpretations of the 'meaning' of other people's behaviour." Kluckhohn and Kelly (1945, p.97) defined culture as "all those historically created designs for living, explicit, implicit, rational, irrational, and non-rational, which exist at any given time as potential guides for the behaviour of men". Furthermore, culture is (1) a descriptive not an evaluative concept, (2) not homogenous, and (3) not uniformly distributed among members of a group (Spencer-Oatey, 2012).

These ways of conceptualizing culture implies that culture does not exist as a phenomenon without cause. It evolves as solutions to circumstances. To this extent, the culture of poverty as described by Mead exists but it cannot be said to exist as a cause. In this regard, the survivalist mind-set Mead evokes to explain work ethic exists as a response to circumstances. If we accept that persons living in poverty globally tend to have higher external locus of control, then it is safe to think of inner-driven, moralistic orientation as a phenomenon associated with successful life outcomes. It is problematic to view internal locus of control as associated with a cultural or social group. It is also safe to say that the fact that poverty is higher in one social group can be attributed partly to high external locus of control. However, one cannot leapfrog to conclude about the nature of the culture on this basis. In psychology, we at least understand behaviour to be the product of personal characteristics and the environment. However, the current evidence is that locus of control is a response to situation (Bandura et al., 2001; Medinnus et al., 1983; Orth, 2018). Campos and colleagues demonstrated, in their World Bank-financed randomised controlled trial in Togo, that teaching personal initiative (an orientation associated with internal locus of control) can result in improved profitability. This shows locus of control is modifiable (Campos et al., 2017).

Mead also contends that African migrants to the US have a challenge dealing with the responsibility that comes with freedom. He ignores the fact that many of the African migrants were located in lower socioeconomic status in their countries of origin and are substantially different from Africans of higher socioeconomic status. Wealthy Africans hardly relocate to the US as migrant workers but only visit for tourism and business or relocate their children for education. This is similar to equating wealthy African Americans to poor African Americans. In this regard, it is better to speak in terms of sub-culture associated with poverty.

We also need to be reminded that locus of control does not offer protection in every situation. Though Ng-Knight and Schoon (2017) have demonstrated that though internal locus of control may make up for background disadvantage or socioeconomic adversity among the youth with respect to avoiding unemployment, internal locus of control is not effective for offering long-term protection against economic inactivity. Using the Longitudinal Study of Young People in England (LSYPE), Ng-Knight and Schoon (2017), showed that internal locus of control cannot help the youth avoid unemployment or being out of education or training for more than six (6) months. It is important to note that as much as internal locus of control is desirable, it has its limits, particularly in situations where the effects of socioeconomic adversity are overpowering. Thus, the social capital that comes with higher socioeconomic status still offers some advantages and privileges that internal locus of control cannot compensate for. In sum, simultaneous changes to both a person's locus of control and structural changes are needed to improve the socioeconomic outcomes of persons who are currently under the constraints of social exclusion.

Conclusion

In this commentary, I addressed the key question of locus of control (sense of personal control) and culture which Mead employed and deployed to account for the disproportionate representation of poverty in the ethnic minority groups in the US. Many commentators regarded Mead's commentary as not only racist but called for its retraction. Indeed, this paper was retracted on July 31, 2020. However, as a scholar, I still believe that it is worth interrogating his ideas, opinions and policy preferences.

At this material moment, there is sufficient evidence to believe that locus of control evolves early in life and that familial influence is implicated. Locus of control established in early childhood persists throughout one's life and it influences the individual's socioeconomic outcomes in adulthood. In particular, locus of control has been found to account for differences in educational attainment, income levels, parental investment, job search behaviour, health status, and financial behaviour. It has equally been shown that internal locus of control is associated with taking more responsibility for work outcomes (Fitzgerald & Clark, 2013; Wang et al., 2010). However, locus of control is an enduring response to circumstances in the immediate or distant past which has been passed on from generation to generation.

Indeed, distinguishable behavioural patterns can be observed between persons living in poverty and those living in affluence. Thus, at this point, there is no benefit to denying the existence of 'culture of poverty'. It rather needs to be seen for what it is: the consequences of living in poverty. In other words, the culture of poverty evolves as a coping mechanism and establishes itself as a guide for behaviour. Culture of poverty

breeds external locus of control; this external locus of control sustains the culture of poverty through its influence on efforts and actions by the poor. The poor are not poor because of their culture but because their ways of coping with their circumstances continue to keep them poor.

If we have evidence that locus of control is modifiable (Campos et al., 2017; McCarty & Ramlakhan, 2018; Van Elk & Lodder, 2018; United States Army Military Personnel Center, 1979), we should indeed develop interventions that target it. Such interventions such as the one implemented in Togo by Compos and colleagues will not change the way members of a social group live (their culture). They will rather change the personality of some members. Hofstede (1991/1994) has identified three levels of uniqueness in human mental programming, namely: personality (both inherited and learned but specific to individuals), culture (learned and specific to a group or subgroup), and human nature (inherited and universal). Targeting locus of control is about targeting personality rather than culture. Thus, attributing poverty to locus of control is not in itself sufficient reason to implicate culture as well. The two constructs (culture and locus of control) are at different levels of human mental programming.

In the final analysis, public policy focused on eradicating poverty should also target modifying locus of control as it is possible to do so. Mead and I reach the same conclusion about the role of locus of control and the need to target it in planning poverty reduction strategies. We differ in our views about cross-cultural variations in locus of control. Current evidence suggests that it is more associated with circumstances of life (poverty) than with ways of living in social groups. If it so happens that in the US, most persons living in poverty are minorities, it does not mean that all the members of the ethnic minorities (and their geographic regions of origin) are characterised by high external locus of control. If that is the case, then the rich in Africa should equally have high external locus of control. Thus, the rich people everywhere demonstrate the same mind-set, which is high internal locus of control. We must, therefore, take culture out of the discussion and focus on what we can modify. However, we must note that, in some situations, systemic or structural changes are more effective than relying solely on individual's locus of control. Perhaps, manipulating both locus of control and structures (policies, processes, procedures, and practices) will be the most effective way to get persons living in poverty out of poverty.

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Intuitive Learning in Moral Awareness.

Cognitive-Affective Processes in Mencius' Innatist Theory

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Abstract

Mencius, referred to as second sage in Chinese philosophy history, grounds his theory about original goodness of human nature on psychological components by bringing in something new down ancient ages. Including the principles of virtuous action associated with Confucius to his doctrine, but by composing them along psychosocial development, he theorizes utterly out of the ordinary that makes all the difference to the school. In his argument stated a positive opinion, he explains the method of forming individuals' moral awareness by means of inseparable integrity of feelings and thoughts, saying human being are born innately good. According to Mencius, heart-mind correlation is the motivational complement of inner incentives. Knowledge and virtue, which are extensions of inborn goodness, comprehended intuitively; then affective motives respond to circumstance, what is learned transmits to cognitive process and eventually behavior emerges. Comparing during the years of Warring State period he lived, in western geography Aristotle, who is one of the pioneers of Greek philosophy, argues deductive and inductive methods in mental activity. On the other hand, Mencius uses analogical reasoning throughout his self-titled work. This essay is an attempt to assert that most postulates of developmental theories, which have been considered an integral part of modern psychology, begin with Mencius in early era. Secondly, this study also aims to discuss the main paradigm of Mencius across emotivist-rationalist opposition, which keeps emotion above thought as well as reason above emotion.

Keywords: Mencius; moral psychology; intuitive learning; self-cultivation; heart-mind correlation.

Introduction

The Spring and Autumn period (771-476 BC), the late Zhou of China, was a stage of chaos due to various feudal states' revolt against royal authority. Despite bloody battles, turmoil of political system and disorder in society, it has been known as the golden age of Chinese philosophy since a broad range of ideas were put forward freely and grew up steadily. Each philosopher guided teachings on the purpose of restoring peace and welfare by ensuring sociopolitical order throughout the country. One of the intellectuals was Confucius (551-479 BC), who founded the Ru school of thought,

called Confucianism¹. Being the first teacher, he idealized a vision of encompassing society within formal education and edifying human interrelation in accordance with traditional norms. His rectifying method in politics depended on governing by a sage ruler whom he characterized as superior man². This term attributed to virtuous nobles follow the way of Dao, obey the laws of heaven and organize societal hierarchy on earth. Chinese philosophy draws a parallelism between cosmology and community, constituting a set of rules in the behalf of secular humanism. In Book of Changes³, the earliest classics, we find out heaven, earth and man are correlated as three realms of cosmogony where Dao is located as the beginning of existence. Each phenomenon rises from metaphysical realm and takes shape in physical realm. This kind of metaphor makes conditional on mutual interaction between unearthly course and earthly route. In other words, human beings are responsible to behave appropriately to correlative cosmology. In this context, Confucius' superior man is a role model for harmonious living according to Dao, while inferior man⁴ is the opposite. Despite categorizing virtuous-unvirtuous agency, he almost doesn't touch on endowments about human nature. Additionally the following idea appears in his Analects, part 17/2: *"by nature humans are nearly alike; by practice humans are entirely different."* This sentence implies that human nature is indisputably neutral. So, we can sort out that such a dictum cannot characterize innate dispositions but rather acquired dispositions learned by experiences. Unlike Confucius, Mencius⁵ comes up with an idea that human nature is originally good:

The good disposition of human nature is like water's tendency to flow down. There are no men innately bad, just as there is no water that does not flow down. Now, by splashing you can make water leap up higher than your forehead, and by applying force

¹ Chinese ru (儒) means wise, scholar, sage; jia (家) means school, philosophical thought and movement. This etymological classification indicates that Confucianism is a system of thought which forms a basis for wisdom among individuals. Four Books and Five Classics have been historically related the written heritage of Confucianism and honored as classics by Zhu Xi (1130-1200) who was the calligrapher, historiographer and philosopher of the Song Dynasty (960-1279). Particularly Four Books, including Analects of Confucius, Mengzi, Doctrine of the Mean and Great Learning, composed curriculum of the civil service examinations of Imperial China, which have run from Han Dynasty (206 BC-206 CE) up until 1905. Thus they had great influence on cultural, educational and political life of Chinese people. For commentaries on these complete works see Zhu, 1983. For a good discussion on virtuous dispositions of sages, see Ivanhoe, 1990. Confucian Classics illuminate behavioral approach in morality; descriptions for ethical methods on behavior, see Gu, 1931; Huang, 2001.

² Chinese junzi (君子) has different translations to western languages like gentleman, exemplary person, virtuous man, superior man etc., however, common emphasis explains a human being living in harmony with natural order and moral principles.

³ Among Five Classics works, Book of Changes stands closest to metaphysical narrative. Both being remembered as the oldest head of Chinese literature and imputed saying "the living water source of the endless flow of Chinese philosophy", it could be a tidemark on interpretation cosmic elements. (Cheng, 2006) In this classical text heaven, earth and man were imaged to three divided line, symbolizing creation, regulation and organization. Heaven generates, earth nourishes and man consummates. For more discussions on secular behaviors integrates heaven, earth and man see Sertdemir, 2021.

⁴ Not only in Analects but also in other classics Chinese xiaoren (小人) has been compared with junzi in all aspects. This term is being used to describe people who are lack of moral conducts and lead the country to chaos. Among various versions listing up villain, mean man, small man etc., we prefer inferior man for this term because it is more explanatory for telling a sample of complete opposite of superior man.

⁵ Mencius name is a Latinization of Chinese Mengzi (孟子) meaning "Master Meng". Mencius (372-289 BC), inherited Confucian doctrine and developed it with his ownmost theories. After Confucius, giving a name of Latinized form for Mencius by western missionaries proves that he is earned the qualification of being second sage.

you can make it stay up on a mountain, but how could this be the nature of water? It is merely a result of circumstances. (*Mencius*, 6a/2)

In this passage we clearly read an innatist theory in which clarifies a thesicle of moral psychology. The main motivation for Mencius might be to elaborate on the issues Confucius avoided discussing with his disciples. Besides, contrary to the traditionalist perspective which distinguishes nobles' class, Mencius focuses on social equality and proclaims intrinsic goodness is universal because all men have natural potential to become wise. Behind the saying of "*the sage and we are of the same kind*", we can notice the shared ability of human being, regardless of hereditary status. He provides a transcendent basis for human goodness and he attempts heaven as the source of inborn tendencies explaining "*man who knows his own nature will know heaven*".⁶ Starting from this point of view, we firstly observe that Mencius claims knowledge and virtue are innate. Refusing the idea about humans are born as a blank slate, his innatism takes a stand against empiricists who maintain neutrality of human nature in just the same way as the theory of *tabula rasa* suggested by John Locke. Secondly, we observe that Mencius turns our attention to natural constancy to realize internal potential endowed by heaven. Everyone spontaneously perceives doing good by means of substantive motives which are naturally endowed, so being prone to doing bad is the result of external desires which stimulate to satisfy physiological needs. Even though he does not directly engage metaphysical inquires, his normative framework on metaethical study relies heavily on intuitive senses. Mencius explicitly expounds moral progress, which integrates conative component to cognitive-affective components. This progress could be addressed as if moral agents begin with feelings, continue by thoughts, end in attitudes. The mainstay of this process is the self-reflection (*xiushen* 修身) which is the essential part of cultivating one's own nature by favour of the guideline termed as "repairing heart-mind, raising disposition (*xiuxin yangxing* 修心养性)".

Alongside his human nature theory, self-reflection means to know innate goodness and regulate behaviors in compliance with endowed potential. He says, "*as for emotions inherently good, is called being good, what is called being bad is not the fault of natural potential*." (*Mencius*, 6a/6) Chinese term *xiu* (修) includes the verbs repair, build, cultivate; and *shen* (身) verbalizes nouns such body, life, oneself. If someone is aware of original goodness, there makes a way to follow spontaneous intuition for improving own character. That's why *xiushen* is referred to self-reflection which emphasizes cultivation on both heart-mind (*xin* 心) and disposition (*xing* 性). The central theme of Mencius' innatism is *xin*, attributing emotion and reason to the same faculty without sharp distinction, presents a new viewpoint assumed mental-spiritual collective. Here it seems being a function rather than organ, *xin* is not simply defined either pure heart

⁶ Mencius, 6a/7; 7a/1.

or pure mind, it is identified as the correlation of heart and mind. Professor James Behuniak points out that Mencius intends to foreground feelings against a more technical mode of moral deliberation and reasoning. But then Professor Chad Hansen remarks that heart-mind comes with all the internal dispositions to moral behavior innate in its own structure.⁷

We coincide the passage 4b/40 of saying *"a great man is one who never lose the heart-mind of a newborn babe"* which explains innocence of xin should be kept as if original status when coming into the world. In Mencius' writings human being becomes evil as a result of losing this original simplicity and childlike naiveté. Since he directly speaks of human nature is good, the cultivation of heart-mind reflects to nourish inborn knowledge and virtue for obtaining both intuitive senses and moral awareness. But Mencius thinks that some people cannot cope with instinctive desires and needs which stimulate self-interested actions preclude natural potential. Using some botanical metaphors to describe innatist potential, he matches Confucian norms with some feelings highlighted as four sprouts (*siduan* 四端), morally inclinations to behave, likens seeds of a plant growing. The sprouts are manifested in cognitive and affective reactions, on which background is human psychology.

Four Sprouts and Intuitive Learning

Mencius is a Confucian philosopher, seeking to reinforce moral values brought into prominence by Confucius, but yet aspiring to detail what these moral values represent. The main virtues are arranged in humaneness, righteousness, propriety and wisdom. In his Analects, part 7/1, Confucius says, *"I am not an originator but a transmitter."* This anecdote most notably evokes that moral judgments and regulations of previous period were reintroduced by Confucius. As for Mencius, however, each norm of virtue corresponds to inner feelings intimated with four sprouts which symbolize tendencies to perceive, think and act in virtuous ways:

The sense of compassion is the seed of humaneness, the sense of shame is the seed of righteousness, the sense of deference is the seed of propriety, the sense of right and wrong is the seed of wisdom. All men possess these four senses just as they possess four limbs.⁸(*Mencius*, 2a/6)

⁷ Behuniak, 2005; Hansen, 1992. This kind of nation equalizes feelings and thoughts. Hence Mencius' assumption is utterly different from rationalists who prioritizes mind before heart like René Descartes and also virtually discrete from emotivists who affirm importance of feelings more than thoughts like David Hume. Chinese philosopher, historian, and writer Feng Youlan underlines that Mencius teaching embodies that moral principles of man concur metaphysical principles of cosmogony and human nature is an exemplification of all these principles. Thusly when we know our nature, we know heaven. Seen in this way, mental-spiritual correlation connotes developing heart and mind simultaneously. (Feng, 2009)

⁸ Chinese ren (仁) means humaneness, yi (義) means righteousness, li (禮) means propriety and zhi (智) means wisdom. Ceyin (惻隱) signifies compassion, xiuwu (羞惡) signifies shame, cirang (辭讓) signifies deference, and shifei (是非) signifies right and wrong.

Four sprouts substantiate Mencius' human nature thesis against certain theories that evaluate inborn disposition as either neutral or changeable.⁹ Every person has these feelings, which are the roots of Confucian virtues and arise from spontaneous ways. Each one guides intentions and decisions of moral behaviors in concrete circumstances. If only they are enhanced compatibly, they will grow and turn into appropriate attributes on character cultivation. In addition to this, all tendential senses are paraphrased by *xin* which carries the meaning of heart-mind. By this way we might conceive a model aggregates reason and emotion rather than contradistinctive theoretical, discussed by western philosophers, recognizes reason as governing emotion and as emotion governing reason. The very first sprout is the sense of compassion, the most impressive statement of inborn goodness in an allegory given out "*all humans have a heart-mind which cannot bear to see other people's suffering*" is written in the same passage.¹⁰ In this regard, relying on heart-mind correlation enlarges this conceptual range; we can say affective impulses awaken cognitive process. Seeing a person meets with a disaster or comes to grief, makes man internally reacts to that person. Mencius exemplifies this intuitive sense by analogy continuing of the same passage:

Nowadays if any individual comes across a little child is about to fall into a well, will indisputably experience the sense of compassion in a state of fear. It is not because gaining the favour of the child's parents, it is not because seeking the praise of their neighbors and friends, and it is also not because building up a reputation among inhabitants of township.

With such a prespecified sensitivity, the heart-mind will respond empathetically and compassionately to the perception of a child falling down a well, probably because inner emotion becomes aware with feeling uncomfortable to the pain and grief the child goes through. In its affectionate sense, heart-mind correlation is going to close particularized ambitions, such as the ambition of saving a little child's life, accords with the principle of humaneness which is the greatest virtue of cultivation of natal nature. Obviously for Mencius, people do right things on the occasion of spontaneous incentives; likewise the sense of compassion is foremost for doing someone a favor without heed of personal profit and interest. Moreover, owing to the fact that sense of shame is explained after compassion and is directly linked to righteousness, we can guess that Mencius holds out a moral pattern rooted in positive feelings. In the chapter 7a/6, he says: "*man is ought to have shame, if one is not ashamed of having been without shame, then should feel ashamed of oneself.*" To some degree, this explanation

⁹ Mencius has his opponents who argue originality of human nature. As far as we know from the classical text of Mengzi, Gaozi claims that man is born without good or bad dispositions. Again, the other Confucian representative Xunzi (310-235 BC) criticizes Mencius' view of childlike innocence saying human nature is inherently bad. See Mengzi, 6a/2; Xunzi, 23/3, 4.

¹⁰ (Mencius, 2a/6). He also establishes a connection between *buren* (不忍), which we translate as 'being unable to bear' and humaneness saying, "*if one can extend this feeling which is far from hurting and harming others, humaneness will come forward.*" (7b/77) Admittedly, those anecdotes show that the term of *buren* plays a key role on morality teaching of Mencius subsuming ability to empathize.

lays stress on the importance of honesty in attitudes conforms to good disposition. Substantially as a motive, shame elicits internal remorse caused by wrong acts.

Bryan Van Norden, who is the translator of Chinese philosophical texts and scholar of Chinese and comparative philosophy, determines Mencius' shame in two contents. In a narrower sense, being ashamed is a disposition to feel shame in situations that one recognizes are shameful for oneself or for those with whom one identifies. In a broader sense, it is a disposition to recognize when actions or situations are shameful (whether for oneself or for others, and whether past, present, future or hypothetical), and to have appropriate emotional and behavioral reaction to this recognition.¹¹ What Norden set forth as a thesis is an appropriate form of orientation to moral conducts inasmuch as Mencian doctrine evidently cites the introspection (*zifan* 自反) and conscience (*liangxin* 良心) through which we coincide with the concepts of modern psychology. For instance, he speaks of self-criticism in a passage about ruler of the country, ascribed as superior man, has to face himself asking *"I expect absolute loyalty from my people but how much confidence I give to them?"*¹² In a similar manner, western arguments regard shame as feeling guilty. For instance, Bernard Williams, who was a moral philosopher, articulate 'what I have done' in one direction towards what has happened to others and in other direction to what I am.¹³ Namely, feeling guilty runs through the minds about casuistry. Mencius persuasively talks on whether feeling self-reproach or not in pursuant of acting adaptable to four sprouts. In the sixth chapter of his book, he tells a story concerning mount Niu. Once upon a time, although the sight of that natural area had been extraordinarily beautiful, the spontaneous balance of nature was destroyed as a consequence of the axes cutting trees with the aim of expanding the borders of the state established in the surroundings. Immediately afterwards he says:

What exists in the heart-mind if ever people possibly be far apart from humaneness and righteousness? The way in which a man abandons sincere conscience, indeed bears a striking resemblance to hewing down on the mountain's trees? – hewing down day after day, how the heart-mind retain its beauty? (*Mencius*, 6a/8)

¹¹ Norden tries to argue for the purposes of demonstrating that there is a sprout of righteousness within the scope of Mencius' claim: for every human, there are some things that he or she avoids doing because he or she believes they are shameful. (Van Norden, 2002: 49-52) For a similar commentary see Jiao 1987.

¹² (*Mencius*, 4b/56) Additionally, throughout the paragraph, Mencius instantiates patterns of behavior within introspective methods whereby superior man is distinguished from inferior man by keeping emotional seeds in his heart-mind. Connecting humaneness to compassion and righteousness to shame, he repeatedly goes into the idea that original goodness intuitively reflects upon moral motivation. The term *cunxin* (存心), which we translate here as keeping the heart-mind, would implicate a motivational force to guide natural standards. Moreover, this conceptual is directly related to the discourse of remaining heart-mind of a newborn babe (*chizi zhixin* 赤子之心) explained above. A superior man is distinguished from others by keeping his heart-mind and a great man is adhered to inborn goodness by remaining innocent. Both put emphasis on Mencius' innatist theory.

¹³ What arouses guilt in an agent is an act or omission of a sort that typically elicits from other people anger, resentment, or indignation. What arouses shame, on the other hand, is something that typically elicits from others contempt or derision or avoidance. (Williams, 1993: 89-93)

Here is coherence between lack of conscience and damaging nature. Mencius reproaches people for cutting down all those trees and ties them into growing away from remorse. In case locals do not have a guilty conscience by reason of harming the nature, they are definitely on the edge of losing original goodness. Concordantly, the sense of shame could be identified as regret, guilt, and disquiet owing to behaviors contrary to the inherent virtuous dispositions. It has therefore been predefined as the seed of righteousness because while introspection and conscience apply to an individual's internal reckoning, questioning, and examining events in a cause effect relationship, shame requires consistency in actual action norms. Exactly like these two major sprouts constitute source to humaneness and righteousness, the sense of deference is depicted as the beginning of propriety, which mainly laid to ceremonial rules and procedures though, is truly another virtue of personal growth model. Unlike Confucius, Mencius terms propriety for establishing an environment that is based on mutual respect and trust. When analyzing the words of Confucius, we may discern a prescriptive approach concentrated on the nobility, whereas Mencius provides an equal and fair exemplification by canalizing etiquette to social norms. At the basis of his non-discriminatory understanding, there is the ethical judgement that each individual descends to earth with good tendencies and has temperamental potential to attain the qualification of wisdom. In this context, propriety could be learned by inherent deference and subsequently extend to human relations through practice of moral values taking form among family members, and then spreading to the communal environment. Mencius says:

If a man treats others in propriety but they response negatively let that man turn towards himself and examine the sense deference. If in any action there occurs a failing, seek the main cause by turning inward. As long as a person is on the right path, the world will appreciate. (*Mencius, 4a/4*)

Being on the right path ensures keeping original goodness for perpetuity. What Mencius alludes to is accurate consistency among emotion, reason and action, which is undoubtedly expressed not only for deference but also for other sprouts. Just like respect and trust, compassion and shame are those generated learning intuitively and put into practice over effective communications with parents in babyhood. Before moving on to the personal development stages, the fourth seed should also be mentioned. In compliance with doctrinal explanations, the sense of right and wrong will grow into wisdom. This claim is about deciding how close intentions are to the moral comprehension at first initiating virtuous and unvirtuous behaviors. In other words, it is the ability to distinguish good from bad and right from wrong.

Chad Hansen interprets the term shi-fei (是非) as a place-maker for classifying things as approved and disapproved.¹⁴ In our opinion, this interpretation might be plausible because making distinctions on correct and incorrect is accommodated with guiding well-behaved deeds. As Mencius says, *“the sense of right and wrong is the path of superior man; the ones unable to distinguish right from wrong are none the wiser”*, so in the event that people are uncomprehensive on what is right to do and what is wrong to do, they inarguably go without wisdom.¹⁵ Yet already remembering the aphorism of *“what is called being bad is not the fault of natural potential”*, we clearly re-express that malicious tendencies, caused in doing something wrong, extend from unfavorable effects of external factors to natural dispositions since they are not inborn. When someone is inclined to the unvirtuous in actions despite being conscious of the virtuous, the root of the issue lies behind not in internal dispositions but environmental conditions. Seeing that mankind is born with the seeds of a good heart-mind there is left poorly marks on elitist strategy since Mencius advocates political and social equality, individuals from every walk of life are internally good, and what led them to become bad is externally. At this point, we must pass on to the stages of personal development in comparison with modern psychology theories.

First of all, introspection method in Mencius, which wholly mirrors reflexive self-cultivation, can be caught up in grounded theory of Wilhelm Wundt, who is known today as one of the founders of modern psychology. His epistemological position reposes on the analysis of cognitive-affective processes, where sensitive and voluntary functions are integral. This means that feelings and thoughts are not separated, sensation and perception are evaluated structurally, and behavioral development is not leaned on a one-sided methodology.¹⁶ The preference for integrative agency sets a good example of how people are frequently unaware of their cognitive bias modification and affective arousal. Due to emotion and reason aren't categorized with different structural characteristics, a postulate that is largely over-identified to the heart-mind correlation in Mencius, can be perceived. Furthermore, reflexivity technique, being similar in content to introspection, by activating affective reactions transfers them to cognitive functioning. Both situatives are induced on the part of awareness to what innately endowed. Once awareness appears, cognitive-affective motives improve onto better, in the contrary case they reduce worse. Ulf Hannerz, who is a Swedish anthropologist, evaluates sense-making and clear-thinking attended

¹⁴ He also addresses that the mature virtue associated with shi-fei disposition is wisdom, the expert control of important action-guiding distinctions. All the correct ways to make all the practically required distinctions must be implicit in our heart's disposition in order to assign shi-fei to things. (Hansen, 1992:166)

¹⁵ Mencius, 3b/13; 4b/59.

¹⁶ According to Wundt, this type of process embodies mental changes and functional relationships between perception, cognition, emotion and motivation. Psychological phenomena are variably changing processes of consciousness. They are experienced as a whole, so the process provides knowledge by introspection. When people observe themselves using reflexivity technique, exploring cognitive-affective motives will get easier. (Wundt, 1973)

to sighting, hearing, touching, smelling and tasting in learned behaviors.¹⁷ Hence, the first step of learning moral agency is predetermined intuition. Now we have to instantiate this assumption over the texts of Mencius. There is a detailed passage in 7a/15 about child development which reminds us the psychosocial theory of Erik Erikson. Master says:

Those who are able to learn without having been acquired by concrete learning possess intuitive ability; those who are able to know without having been exercised by concrete thinking possess intuitive knowledge. During the infancy, children carried in the arms all know to love their parents and as time goes on they all know to respect their elders. Affection develops humaneness, esteem develops righteousness. All that need be done is to extend these feelings throughout the world.

It's necessary here to clarify exactly what is meant by intuitive ability (*liangneng* 良能) and intuitive knowledge (*liangzhi* 良知). Mencius states that people learn spontaneously since teachable moments are supported by activities of parents. And also people know spontaneously, since comprehensible experiments are encouraged by touches of parents. Inner feelings such as love and respect are nourished intuitively by the interaction field of individuals in infancy. Within this framework, we can find out that innate senses aren't acquired through studying or deliberating. There might have been a way of learning for loving parents and respecting elders, however, it is formed as a result of affectionate and companionable physical touches of parents. Emotional engagement boosts early childhood development, so children recover from neglected environments.

Prof. Dr. Ann Bigelow of developmental psychology, whose researches are into parent behavior and infant development, underlines that close contact between mothers and babies particularly in the newborn period helps young children to learn affection of others' responses so that they sense active agents in their environment.¹⁸ It is understood that an infant's first experience with the surrounding environment occurs through compassionate touches of parents. Intuitive perception is essential to children's growth of mental abilities, cognitive skills and social-emotional competency. As Mencius says children carried in the arms, tend to learn affection instinctually and intuitively. Providing that parents treat their children with affection and compassion, development process is influenced positively. On the contrary, supposing that parents ignore their needs and neglect giving close attention the process is affected negatively. Apparently, parents are primarily responsible for the stages in exploring innate goodness and self-improvement of infants. When we consider intuitive learning as

¹⁷ For more see Hannerz, 1992. In the same vein, Jean Piaget suggests a growth pattern going into intuitive thinking throughout his theory of cognitive development and epistemological view. Piaget focuses on children have specific reflexes that enable them to interact with their environment. Along with intuitive thinking they make progress in cognitive skills. (Piaget, 1995)

¹⁸ Bigelow also specifies that infants with parents' closely contacts which develops affectionately, makes a huge contribution to learn feelings and thoughts most correctly. Therefore, establishing healthy dialogues indoors is critically has importance on cognitive and behavioral development of the babies. (Bigelow, 2005)

the first stage, it is needed to shed some light on what the next stages phase. An unattended child is more likely to experience whatever bad tendencies arise from external factors. To set an example, individuals with disconnected family bonds, intimated partner violence and indifferent, dismissive or even completely neglectful to the needs of their children, cause them to become self-centered and self-interested, unaware of moral awareness.

Psychology refers to this style of parenting as uninvolved parenting which is low on both parental responsiveness and parental demandingness.¹⁹ An authoritarian parent uses regimental punishments to control behaviors. Children growing up under such circumstances are unable to learn the senses of compassion, affection or deference and shame, having an unhappy disposition and low self-esteem. A permissive parent chooses to decontrol to remove boundaries. Children, raised by doing whatever they want to do, always have egocentric tendencies and encounter problems in social interactions. In respect to this, we can say that Mencius makes it clear that he favors the authoritative style. As described in the passage, young children carried in the arms of their parents incontestably own to love family members in order that affection and compassion will be extended to others. Exhibiting love for other people thusly arises out of unconditional compassion, holding in high esteem by parents. As written in continuation of the same passage, individuals are generally able to feel deference for elders in order that esteem and reverence will be extended to others. Paying respect for other people becomes manifest by voluntary control because what children experience runs in the family reflects to outside world at the hands of parental attitude. So it seems that familiar contexts typically feature in superiority and inferiority of self-improvement as well as intuitive learning which traces spontaneous moral cultivation.

On this assumption, it might be possible to deduce that Mencius' philosophical theory approaches to Erik Erikson' stages of psychosocial development. In his studies, Erikson stays focus on child development in terms of interpersonal relations since the environment in which a child lived was crucial to providing growth, adjustment, a source of self-awareness and identity.²⁰ Early childhood is the most important for learning secure attachment, whose style has direct influence on the rest of infants and toddlers' lives. Development of trust can help to feelings of hope and confidence, by contrast, development of mistrust can lead to feelings of frustration and lack of

¹⁹ During the 1960s, developmental psychologist Diana Blumberg Baumrind described three different parenting styles based on her research with preschool-age children: authoritarian, authoritative and permissive parenting. While authoritarian parents harshly set up strict rules and demand obedience, permissive parents are overly responsive and far apart from enforcing rules. On the other hand authoritative parents are usually firm but not rigid, responsive to the child's needs but not indulgent. See more Baumrind, 1966. In later years, researchers added a fourth style known as uninvolved parenting, on which individuals may have mental issues, and they raise their children regardlessly. As a consequence, those kids cannot regulate emotion and reason, being more prone to criminal commitment, drug addiction and suicide attempts.

²⁰ Although Erikson' theory of personality development contains eight phases, the first phase centers around parenting on basic needs of infants. If parents provide their children to dependable affection, the infant is going to learn to trust. But if parents fail to provide a secure environment, a sense of mistrust will spring. For details see Erikson, 1994.

confidence. Should courage and independence area sets correctly by parents until school-age, sense of judgement can be revealed. Otherwise, toddlers in this stage may be exposed to struggle with self-regulation and self-control. According to Mencius, learning the feelings like affection and compassion cannot be qualified for moral awareness alone. Virtues must expand to the social environment through reasoning as well as the power of discernment which explained as the sense of right and wrong. It goes without saying that each stage of learning moral behaviors is elaborated on heart-mind correlation; emotion is therefore not motivated separately from reason. In fact, exploring all innate seeds from compassion to wisdom actuating virtuous action triggers by spontaneous intuition, but nevertheless it could be the thoughts which completes feelings and evokes performative acts. What Mencius wishes to emphasize with cognitive-affective process is implicitly based upon mental-spiritual collective is being interconnected with inseparable integrity.

Analogical Reasoning and Cognitive-Affective Processes

When we look through the classical text of Mencius, it can discriminately be articulated that there are many stories telling of by analogy. In those years western philosophers, like Aristotle, had been using deductive and inductive methods on mental activities, so Mencius had opted for a brand-new method via analogical reasoning. Professor David Wong exhaustively writes out distinctions of identification on logical reasoning. As a notable example to Aristotelian model he states that since practical wisdom is acquired through experience, inputs of new information simply repose on specifical process of mind employing both deductive and inductive methods.²¹ In our opinion, Wong' thesis substantially reflects the truth because Mencius evaluates cognitive and affective processes without exception. In the first chapter of the book, we come up to a dialogue between governor Xuan of Qi and Mencius, which is about how to govern the whole country virtuously. When he observed an ox being sacrifice, he commanded to replace the ox with a little sheep unseen. Mencius confirms his merciful act²², additionally, reminds him to treat in the same compassion to his people by analogical reasoning:

There was no harm in what you did, your conduct was a method of humaneness; you had seen the ox but had not seen the sheep. A superior man is always compassionate

²¹ In his paper, Wong argues that in Mencius there is a conception of ethical reflection giving justificatory priority to the particular disposition which is completely different from western techniques and tries to maintain that this conception is a genuine contribution to individuals' understanding of moral reasoning. See more Wong, 2002. Along similar lines, Professor David Shephard Nivison defines analogical reasoning within the meaning of heart-mind correlation saying; "*Mencius makes a commonsense distinction between judging something or believing one should do something and actually doing it, and given his view of motivation.*" In Nivison' reading, we might figure out those emotional and logical decisions are stimulated successively. At first, we feel innately by virtue of the heart, and then we put what we feel into action through the mind. Extensions of moral actions are coordinately applicable as long as one decides to do virtuous behavior. See more Nivison, 1996.

²² What is meant by compassionate behavior is to avoid hurting and harming others (buren ren 不忍人). All human beings have the natural tendency for acting altruistically. See other explanations in Xu, 2002.

towards animals, when he sees beasts alive, he cannot bear to watch them die. Now here is your kindness could extend even to the beasts but could not extend to your people. If your people are lack of protection it is because you are not compassionate to them. Hence you might not rule the country as a virtuous ruler only because you won't not because you can't. (*Mencius, 1a/7*)

Having a heart-mind that cannot bear to see living creatures suffering gives us clues in natural compassion. For Mencius, it is the prerequisite skill motivated by intuitive learning. All people feel the sense of compassion since because they are unable to stand someone runs into a difficulty or grief and disaster. Accordingly, he verifies affectionate attitude of Xuan but still advises him to extend his mercy and leniency on behalf of every segment of society for being a true virtuous ruler. In short, Mencius thinks that if governor of Qi wish to become a superior man, he has to make great effort to utilize his inborn potency and ability. This is both about political regularity and social equality. We should take note here that to respond the pain of an animal but not to respond the pain of a person conflicts with moral behavior. Mencius' claim could be understood as extension of knowledge and virtue conforms to maintaining emotional commitment and relational judgement. Professor Kwong-loi Shun argues that four sprouts must be nurtured by an appropriate upbringing to develop into the cultivating forces. So he points out that Mencius associates Xuan's compassionate response to the sacrificial ox with the execution of an innocent person.²³ This sort of connection is presupposed both cognitive and affective processes, since feeling phases analogical reasoning into acting. Methodologically, the ranges of moral activity progress not only by the sense of compassion, but also by the practice of compassion. If someone does not conduct in conformity with affection on the stability of intention and decision despite possessed inherently, affection remains only an internal feeling. Taking this into account, convincing people to pertain sage-like behaviors, Mencius exemplifies what is sufficient for true virtue in conversation above is responding compassionately to the suffering of human beings as well as responding compassionately to the sufferings of other living creatures.

From Mencius' standpoint, each individual is emotionally affected and motivationally has potential to respond with spontaneous intuition. The reason why Xuan fails to govern his people with humaneness is because he is unaware of his own capacity and ability. Feeling compassion for an ox is inadequate to extend humaneness. The necessity of analogical reasoning is an indication that moral attitudes and behaviors properly passes through the stages of intention and decision. Later in their conversation, we also see the hidden meanings of sensitive desires which cause us to be prone to malicious intentions and decisions related to self-centered and self-interested motives.

²³ In the meantime, Shun contends that Mencius' opinion for being wise denotes high capacity to act virtuously due to original goodness. Furthermore, as emotional dispositions of the heart-mind correlation are directly emerged by four sprouts, logical thinking guides people to the path of goodness and moves away from the path of badness. See Shun, 1997.

Mencius thinks that being greedy for having more interferes with sageliness. If people from propertied class like Xuan and other rulers around the country concentrate on satisfaction of their physiological needs along the lines of appetitive desires, it might be unfeasible to improve inborn potential. Proposing a heart-mind correlation within feelings and thoughts, each level of self-cultivation is linked to both emotion and reason. But by yielding to material desires, intentions turn towards unvirtuous action and decisions diverge away from moral awareness. Along the text, it can be seen the integrity between the concepts qing (情) and si (思) to expand original goodness in every division of lifetime. Notionally, qing is referred to feel and si referred to think. Once four sprouts are motivated by qing, the next phase is to provide motivation by si. From this point of view, it is understood that the heart-mind correlation forms the basis for both feelings and thoughts to act virtuously at the same time. Mencius says:

Ears and eyes are organs that do not think. Their perception is only veiled by external things. The organ which thinks is heart-mind. If you think you will gain if you don't you will fail. This is the potential endowed in us by heaven. When a man chooses to stand by his superior parts, his inferior parts are unable to seize him. Being a great man is no more than this. (*Mencius, 6a/15*)

There is a whole range of points about intuitive learning rather than empirical learning and functions of brain coordinated with emotional dispositions. As Mencius writes here, physiological needs along the lines of appetitive desires cannot think, the only thing they make people do is to move directly what sensory organs is being attracted to. On the other hand, the heart-mind guides people to think rightly because it spontaneously actuates innate senses and more importantly emphasizes mental suggestions restraining us from the needs of physical nature. At the prologue of this passage, Mencius speaks of two opposite ways of personal growth, one is named as qualified the substance (*dati* 大體) and the other is named as unqualified the substance (*xiaoti* 小體). In Chinese etymology, ti (體) means body, characteristics, essence and personal experience. But we mostly observe it throughout classical texts using as a noumenon which evokes functional sense of being fundamental, arising internal and reflecting external. In this context, improving superior parts is equal to qualified the substance and following inferior parts is equal to unqualified the substance. How we morally grow by accumulating four sprouts stem from the motivation that appropriately extends cognitive-affective process. Through the agency of intuitive learning we begin to feel what is originally endowed, through the agency of analogical reasoning we move to think what is innately possessed. When people prefer to be guided by physiological needs and instinctive desires but not to be emerged by natural core planted for moral virtue, nourishment of the heart-mind can be left beyond the realm of possibility. Thusly, instead of being responsive to tendencies to support fulfilling desires, Mencius offers being responsive to dispositions to nurture fulfilling virtues.

As we may restate that in the fourth chapter of the book he mentions *cunxin* (存心) which signifies fulfilling the heart-mind as well as keeping the heart-mind.²⁴ His repeated discourses on integrity of emotion and reason reflect that the primary motivational baseline of four sprouts activates spontaneity arisen from innateness. Maintaining original goodness (善性), keeping the heart-mind (存心) and remaining the heart-mind of a newborn babe (赤子之心) are equivalent to being a great man. Just as feelings are not superior to thoughts, thoughts are not superior to feelings. In this regard, it is plausible to think that self-cultivation model of Mencian idea practices ethical epistemology, which is opposed by empiricists and rejected by rationalists. Such an understanding paves the way for Mencius to assert a new thesis in ancient times.

During the same period in the west in Aristotle's *Nicomachean Ethics*, we noticeably see that the theory of knowledge allows reasoning techniques but not discuss analogical reasoning or analogical argument. He says; *"since the perception is the same, so is the knowledge also."*²⁵ It is stated that the degree of likeness between two concepts generalizes by virtue of induction and deduction. Although theoretical components roundly hit analogical perceptions, the method of comparing old knowledge with the new is typically apart from analogy. Starting from this, we might conjecture that Aristotelian perspective organizes similarities with computational forms. Reasoning from special statement to reach a conclusion on general truth involves in deduction, and reasoning from general statement to reach a specific derivation involves in induction. Deductive-inductive synthesis constructs the interference onto likeness among various events and features, but however, is derived from analogical arguments in drawing a comparison. In our opinion, the main reason about this line of reasoning is that Aristotle does not put forward an idea in innatism. His postulate is based upon the acquisition of knowledge and virtue learned through experience. Another discussion is found in David Hume, who was one of the enlightenment philosophers. Even though his own thesis on intuitive learning touches on some points similar to Mencius, he claims that human nature is neutral. We can easily say that both of them agree on sensibility theory, but it should be known that Hume concentrates on feelings rather than thoughts. Since moral agency has its source in emotional dispositions, the assumption of Hume cannot integrate cognitive-affective processes. He maintains a sentimentalist principle which holds ethical behavior grounds in internal senses,

²⁴ Neo-Confucian philosopher of Qing Dynasty, Wang Fuzi (1619-1692) explains this notion on the centerline of analogical reasoning. According to Wang, the heart-mind correlation and fulfilling it with moral agency is closely related to personification. If humans cannot strengthen original goodness by way of emotional and logical constituents, the motives for ethical attitudes won't stimulate questioning intentions and decisions. See Wang 1975. In addition to this, Professor Keqian Xu clarifies this notion as a part of conscience (*liangxin* 良心) and endowed nature by heaven (*tianxing* 天性). See Xu, 2006. Those commentaries indicate that what is meant by fulfilling and keeping the heart-mind is approached to inner knowledge and virtue in some ways. With reference to this, we should mind out the evidence on cognitive-affective process is a complement in self-cultivation as a result of mutual interaction.

²⁵ (Topics, 156b10-17) Aristotle also draws attention to the principles of two phenomena being compared saying; *"everything that grows and is naturally generated always leaves a residue, like that of things burnt, consisting in this sort of earth."* (Metaphysics, 358a17)

explaining *"reason can only be the slave of the passions"*.²⁶ Keeping this reading in mind we may see reflexive and intuitive learning methods of Mencius in Hume, but it is out of the question to observe a heart-mind correlation because of the fact that Hume disclaims logical inference assuming ethical distinctions are rooted in emotional immanence. The common ground where they meet is their opposition to rationalists and psychological egoism. So, it can easily be expounded that Hume has embarked on a close understanding of emotivism.

While rationalists regard reason as the origin of knowledge, emotivists regard emotion as the origin of knowledge. When considered this divergence on the source of knowledge, we arguably sort out that Mencius' theory is exactly different from all debates. Due to the heart-mind correlation, which performs the motives to activate thoughts by feelings, four sprouts enhance moral agency with the integrity of supervising intentions and decisions. It is the way to occur superiority predominating inferiority. Mencian doctrine on behavioral development bases the spontaneity sensibility. In the beginning of ethical courses, two explanations have been keynoted: having a heart-mind of being unable to see other people suffering (不忍人之心) and preserving the innocence of infantile heart-mind (赤子之心). Senses of compassion, shame, deference, right and wrong configure moral dispositions into actions with the sensibility of heart-mind, as seen in the example of responding little child who is about to fall down a well. Mencius emphasizes that whose intuitive ability and intuitive knowledge are complete, could be vulnerable to react to others' experience of grief and trouble. The same response is held true for the governor of Qi, who felt pity for the sacrificial ox. It proves that the affective process, which begins with inner feelings, extends to cognitive process with analogical reasoning in the phases of intentions and decisions. As mentioned in many passages, self-cultivation is adhered to rules of nourishing four sprouts, fulfilling constitutive social roles and engaging relational unity.²⁷

Mencius describes four sprouts using the term of xin, which gives the definition to heart-mind: the heart-mind of compassion (惻隱之心), the heart-mind of shame (羞惡之心), the heart-mind of deference (辭讓之心), the heart-mind of right and wrong (是非之心). These innate feelings make us apprehend our shared humaneness and righteousness, teaching to affection and esteem. Once we explore original goodness,

²⁶ According to Hume, mind is not just an evidentiary field of thoughts; it is a faculty surrounds the origin of feelings, desires and actions. Being the center of all perceptions, emotions pervade within the function of our minds. Hume says: *"Morals excite passions, and produce or prevent actions. Reason of itself is utterly impotent in this particular. The rules of morality, therefore, are not conclusions of our reason."* He clearly denies practical reason as thoughts have less importance than feelings to behave virtuously because thinking has no original influence without the existence of feeling. For more see Hume, 2000.

²⁷ Throughout his classical text, Mencius repeats that four senses are essential to human beings and goes further in the second chapter saying: *"anyone who is lack of the heart-mind of compassion could not be human, anyone who is lack of the heart-mind of shame could not be a human, anyone who is lack of the heart-mind of deference could not be a human, anyone who is lack of the heart-mind of right and wrong could not be a human. We all have these four sprouts, but yet if one claims not to have them, is nothing less than a thief."* (Mencius, 2a/6)

our attitudes and behaviors will be altruistically directed in certain ways. Approving the right and disapproving the wrong will guide us to corroborate our knowledge and virtue. The prerequisite to follow endowments is to extend moral agency for all living creatures without any exceptions, as Mencius advises the governor of Qi using analogical reasoning to weigh his heart-mind in order to become aware of the extension of his compassion to his own people.²⁸ Here, we should render the idea of weighing the heart-mind most likely indicates simultaneity between emotional motives and perceptual patterns before acting in accordance with reasonable decisions. What keeps down individuals from treating others in tenderness are the supreme desires tended to be satisfied. Mencius says: *"to nourish the heart-mind, nothing is better than having few desires."* (7b/81)

It is our contention here that distinguishing right from wrong has a basis for reducing appetitive desires to facilitate the nurturance of original goodness. When Mencius speaks of adverse effects on the greed of governor of Qi, we can evidently see in the texts that pursuing ambitions such as broadening territories, having more bondmaid, getting richer and eating redundant foods, is like trying to catch fish by climbing a tree.²⁹ In any case, a true virtuous ruler, who deserves to qualify as superior man, should engage with his people because to alleviate their sufferings compassionately is much more important than to satisfy his own desires self-interestedly. Engagements in the motives of emotion and reason therefore enable us to improve moral agencies to predominate appetitive desires. What Mencius emphasizes is that human beings have the natural potency and congenital capacity to activate four sprouts along with correlation of the heart-mind:

Original nature of superior man is belonged to humaneness, righteousness, propriety and wisdom which are rooted in his heart-mind. They bloom in his countenance, brighten in his appearance, widen in his shoulders and complete in his four limbs. The four limbs are comprehended without being told. (*Mencius, 7a/21*)

This is all to say that four sprouts fulfill four standards of virtuousness unless they grow by favor of physiological needs being responsive to desires. To attain moral behavior in accordance with inborn nature requires people to follow the norms which carry out self-cultivation. Just as the sense of compassion cultivates humaneness, the remaining three senses cultivate other norms of virtuous actions. At this point, we can say that feelings and thoughts integrate cognitive-affective processes in a pattern of personal growth. Since Mencius theorizes a pattern completely different from

²⁸ "It is by weighing that the weight can be known; it is by measuring that length can be notified. All things are determined like this, particularly the heart-mind." (Mencius, 1a/7)

²⁹ (Mencius, 1a/7) Mencius diffusively lays open distortive desires through his dialogue with governor Xuan of Qi giving a set of examples about what is appetizing to possess as abundant foods, fine clothes, colorful objects, obedient servants wide borders and so on. Using analogical reasoning he draws a correspondence between longing for satisfied needs and catching fish from improbable point. Jiao Xun also works through on the dialogue expounding which desires are unvirtuous. See Jiao, 1987.

empirical and sentimental suggestions in regard of the heart-mind identified as the core of innate dispositions, there might be observed certain structures of attitudes includes motivational phases explained in modern psychology. The first phase is to know intuitively by virtue of four senses what is essential for orientation to moral agency. The second phase is to think thoroughly using analogical reasoning about how four sprouts activate intentions and decisions. The third phase is to expand all sprouts from compassion to wisdom equally and fairly with moral awareness. It is unarguably seen that Mencius assumes a comprehensive process which accommodates cognitive and affective components. Although main principles of his theory based on human nature is originally good are explored spontaneously, human effort is necessary to raise innate dispositions. With the heart-mind correlation being offered, he is neither an emotivist nor a rationalist. In the ideological idea coordinating emotion and reason, we should figure out that he stands for ethical epistemology.

Conclusion

In this essay, we examined Mencius' innatist theory with reference to the distinctions on traditional normativity of Confucianism. Being honored as second sage, he inherited and carried forward the principles transmitted by Confucius such as humaneness and righteousness, but the fact remains that he creatively developed a nonconventional hypothesis claiming human nature is originally good. In order to enhance the persuasiveness of his argument, Mencius adopted a method using metaphors to associate human nature with flowing water and innate dispositions with botanical growth. To illustrate the idea of moral awareness, we discussed positive-negative effects of reinforces and interferences to both intentions and decisions. To our quest for the essence of Mencian thought, emotion-based and reason-based approaches indicated a fundamental question about whether feelings or thoughts are the motives of moral progress. Taken the heart-mind correlation into consideration, we found that stages of personal development are suggested a mental-spiritual collective which explains feelings and thoughts have the equally significance.

We have drawn three phases of Mencius' metaethics of self-cultivation to assert his theory holds an early model of modern psychology. The first and most substantial phase is to learn incipient tendencies intuitively. According to Mencius we all have inborn dispositions to feel virtuously owing to the senses of compassion, shame, deference, right and wrong which are endowed by heaven. How those four sprouts make it possible to improve original goodness underlines an internal intention before action spontaneously. The second phase is analogical reasoning, which provides feelings for integration into thoughts compatible with inborn virtues. If individuals decide to act in pursuance of four sprouts, moral agency can be utilized in accounts of

humaneness, righteousness, propriety and wisdom. The third phase is to expand four sprouts so as to adjust environmental experiences. In our opinion, Mencius's claim on innate moral intuitions begins with awareness of natural potency and capacity manifested in spontaneity, continues with introspective method on which people search the truth in their conscience by reason of the norm remaining heart-mind of a newborn babe (赤子之心).

In furthering our understanding of the relation between cognitive and affective processes, we also found that Mencius states original goodness of human beings forms motivational foundations, since knowledge and virtue are accidents of birth. Reflective functions between emotion and reason verifies that there is neither a rational nor an emotional thesis. Instead, in his teaching, Mencius guides us to follow innate morality fulfilling the heart-mind (存心). Alongside undeniable effects of being responsive to others' sufferings learned intuitively as well as four sprouts during the infancy supported with responsibilities of parents, we can affirm that Mencian self-cultivation specifies the theory of psychosocial development down to the last detail. Consequently, unlike his contemporaries who accept human nature is neutral or social, Mencius idealizes the goodness of original nature which is emerged spontaneously but is maintained extensively. As it turns out that this apprehension had built a constructivist perspective to ethical epistemology more than two thousand years ago, but it must also be known that Mencian doctrine lays the practical base in today's psychological issues.

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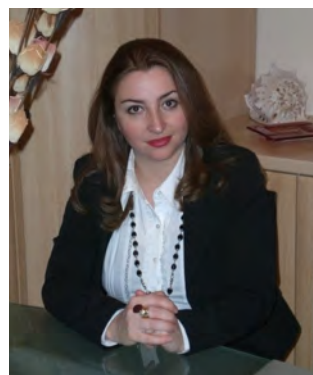
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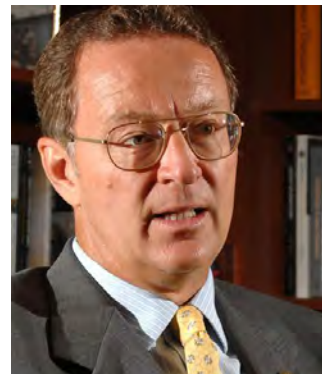
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